



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL

OFFICE OF THE  
SECRETARY

89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

PHONE: (302) 739-9000  
FAX: (302) 739-6242

**Secretary's Order No. 2015-A-0005**

**Re: Application of Delaware City Refining Company, LLC to Renew Regulation  
1130 Air Quality Management Title V State Operating Permit**

**Date of Issuance: April 10, 2015**

**Effective Date: April 10, 2015**

Under the authority granted the Secretary of the Department of Natural Resources and Environmental Control (Department) under *7 Del C. §6003*, the following findings, reasons and conclusions are entered as an Order of the Secretary.

**Background**

This Order considers Delaware City Refining Company, LLC's (Applicant) application to renew its Title V State Operating air quality management permit under Department *Regulation 1130. Regulations Governing the Control of Air Pollution, 7 DE Admin C. §1130* (Regulation 1130). The Title V permit renewal reflects in a single permit all the emission limits previously established by other permits from all the stationary air emission sources at the Applicant's petroleum refinery located at 4550 Wrangle Hill Road, Delaware City, New Castle County (Facility).

The Department's Division of Air Quality (DAQ) reviewed the application and determined it was complete. DAQ's experts prepared a draft permit, which was the subject of the Department's public notice on January 20, 2013 and the beginning of a public comment period that ended on February 19, 2013. The Department received a

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meritorious request for a public hearing from the Delaware Chapter of the Sierra Club, and in response provided on March 10, 2013 public notice of a March 25, 2013 workshop. On April 28, 2013, the Department provided public notice of a public hearing to be held on June 4, 2013. The public hearing was attended by approximately 1,800 persons, who were able to listen by loudspeakers and limiting the speakers' time to speak.

The Department's presiding Hearing Officer prepared the attached Report of recommendations, which supports the issuance of the proposed Title V permit for review by United States Environmental Protection Agency (EPA).

### **Findings and Discussion**

The Department finds that the Report's recommendations to issue the proposed permit, as prepared by DAQ, are well-supported by the record. The Report is hereby adopted to the extent it is consistent with this Order.

The Report reviews the record and relies on DAQ's technical response memorandum (TRM), which provides sound reasons why most of the proposed changes suggested in the public comments should not be adopted. DAQ recommended some minor changes in response to some public comments and in response to EPA's 2014 decision on certain limits on two large sources of emissions at the Facility.

The Department's decision to issue a renewed and updated Title V permit is based upon the record that supports such action as consistent with state and federal laws. In addition, the renewal is consistent with improving the Department's ability to exercise more regulatory authority over the Facility's air emissions than it currently does based upon an outdated Title V permit that does not reflect all the ten permits issues since the last Title V permit was issued. Many of the public comments in opposition to any permit

renewal fail to appreciate the benefits from a renewed and updated Title V permit. Indeed, despite the Department holding a workshop to explain the Title V permit, many of the public comments erroneously believed that the Title V permit renewal would result in the authorization of increased air emissions. The renewed and updated Title V permit does not authorize any increase in air emissions that have not previously been authorized by Department permits, which were all issued after the opportunity for public comment, including at public hearings. Thus, the comments that the Title V permit would authorize new emissions are simply incorrect and based upon a misunderstanding of the Title V permit process.

The renewed Title V permit reflects the emissions limits in ten permits not previously included in the current Title V permit last amended in 2011. This permit remains in effect pending Department action on this renewal application, but does not include the emission limits in the ten permits issued since the last Title V permit amendment. The inclusion of the ten permits into the Title V permit will provide the Department the ability to enforce the state permits under federal law, as opposed to the more limited ability to enforce solely under state law. The updated and renewed Title V permit approved by this Order thereby will expand the Department's authority to enforce state permits' air emissions limits in federal courts. Thus, the renewal of an updated Title V permit will allow more effective and comprehensive regulation of the Facility's air emissions.

The Report considered the public comments, particularly the issues raised by the Sierra Club. The Report concluded that these comments did not support any modification to the draft permit, or the more drastic action of denying a Title V permit renewal. The

Report concluded that Title V permit process is not the proper forum for making the changes advocated by some of the public comments, such as requiring another air quality monitoring station to be built, changing the Facility's emergency response plan, demanding the Department issue a surface water discharge permit that eliminates the open loop cooling system, requiring that the Applicant not use crude oil produced from the tar sands areas, seeking better regulation over flaring and emissions during start up and shutdown procedures, and demanding that the Applicant be cited as a chronic violator for enforcement violations. These issues were addressed in the Report and in DAQ's TRM, which explained why the changes were not appropriate in this Title V permit proceeding or in any Title V permit proceeding.

The Applicant had many supporters at the public hearing, who voiced support for the reissuance of the Title V permit and wanted to counter any effort by those who sought to close the Facility. These supporters cited the Facility's jobs, the economic benefit the Facility provided to Delaware, and the good performance record under the new ownership by PFB Energy, Inc.

The Department shares many of the concerns raised by the public comments on the Facility's impact on the environment, public health and the economy. The Department, however, considers that these concerns are consistent with issuance of the renewed and updated Title V permit. The Department finds no basis to support a denial of the permit or the imposition of permit conditions on the source of supply used by the Facility or the Facility's surface water discharge system. The Title V permit, as prepared by the Department's experts in DAQ, includes reasonable conditions previously approved in permits and required by EPA and the proposed permit should be sent to EPA for

review and approval so that a renewed and updated Title V permit may be issued to provide the Department with another enforcement tool to use if needed to obtain compliance with the previously issued permits. The Department finds that the renewed and updated Title V permit properly reflects the previously issued ten permits and the EPA determined emission limits.

Finally, the public comments raised questions with the public notice and the hearing location. The Department properly provide public notice and responded to changes in a reasonable manner when it re-located the hearing location to a nearby large hearing room. The Department properly undertook considerable effort to accommodate the larger than anticipated crowd that showed up at the public hearing. The Department only realized the size of the crowd shortly before the scheduled public hearing and immediately took reasonable steps to accommodate the large crowd, including the change in location to a larger nearby hearing room and the installation of loudspeakers to allow all present to listen to the hearing. As noted by the hearing officer, by the end of the hearing all persons who wanted to comment were provided sufficient opportunity to comment on the record, either at the public hearing or in written comments during the 30 day period following the hearing. In sum, the Department's efforts were reasonable under the circumstances, and there are no adequate grounds to require the considerable time and expense in holding another public hearing.

In sum, the Department adopts and directs the following as a final order of the Department:

1. The Department has jurisdiction under its statutory authority to make a determination in this proceeding;

2. The Department provided adequate public notice of the proceeding and the public hearing in a manner required by the law and regulations;

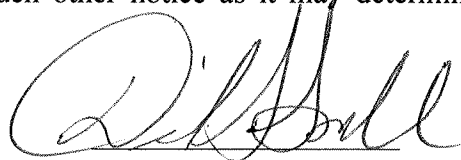
3. The Department held a public hearing in a manner required by the law and regulations;

4. The Department considered all timely and relevant public comments in making its determination;

5. The Department shall submit to EPA a proposed permit, as prepared by DAQ, in order that EPA may to conduct its review and ultimately approve the issuance of the renewed and updated Title V permit to the Applicant;

6. The Department shall issue a permit to Applicant as soon as possible once the EPA has reviewed and approved such action and in a manner consistent with EPA's approval; and that

7. The Department shall publish its final decision on its webpage and shall provide notice of this action by publication of legal notices in a manner consistent with the public notice of the application, and shall provide such other notice as it may determine appropriate.

A handwritten signature in black ink, appearing to read 'D. Small', written over a horizontal line.

David S. Small,  
Secretary

## HEARING OFFICER'S REPORT

TO: The Honorable David S. Small  
Secretary, Department of Natural Resources and Environmental Control

FROM: Robert P. Haynes, Esquire  
Senior Hearing Officer, Office of the Secretary  
Department of Natural Resources and Environmental Control

RE: Application of Delaware Refining Company, LLC to Renew its Title V Operating Air Quality Management Permit for the Delaware City Refinery near Delaware City, New Castle County

DATE: February 11, 2015

### I. PROCEDURAL HISTORY

This Report makes recommendations to the Secretary of the Department of Natural Resources and Environmental Control (Department) on Delaware City Refining Company, LLC's<sup>1</sup> (Applicant or DCRC) permit application, which was submitted May 22, 2012 to the Department's Division of Air Quality (DAQ). Applicant seeks to renew the Department Title V permit<sup>2</sup> for DCRC's petroleum refinery at 4550 Wrangle Hill Road, Delaware City, New Castle County (Facility).

On June 26, 2012, DAQ notified DCRC that the application was not complete, and DCRC provided the missing information in a July 30, 2012 submission.

In a September 19, 2012 letter, DAQ notified the Applicant that the application was determined to be administratively complete, and that DAQ would prepare a draft permit, as required by the Department's Title V permit procedures, which under the oversight of the United States Environmental Protection Agency (EPA).

On January 20, 2013, the Department had published public notice of the application and DAQ's draft permit Air Quality Management Operating Permit 003/00016-Part 1 (renewal 1)

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<sup>1</sup> Applicant is a subsidiary of PBF Energy, Inc.

<sup>2</sup> The permit is a state Title V operating permit ("Title V permit") authorized pursuant to Title V of the 1990 amendments to the federal *Clean Air Act*, U.S.C. §§501-507, ("CAA"), and 7 Del C. Subchapter VIII and Section 7.0 of Regulation 1130 in the Department's *Regulations Governing the Control of Air Pollution* ("Regulations").

(Revision 5), Part 2 (Revision 5) and Part 3 (Renewal 1 (Revision 5)). The notice opened a public comment period ending February 19, 2013 for written comments. DAQ also prepared a Review Memorandum, which explained the draft permit's terms and conditions and how it included the ten permits issued since the last Title V permit revision.

In a February 18, 2013 letter, Amy Roe, Ph.D., Conservation Chair of the Delaware Chapter of the Sierra Club (Sierra Club), submitted comments and requested a public hearing. On February 19, 2013, DCRC submitted comments.

In a February 21, 2013 email, DAQ Director Ali Mirzakhali provided a response to Dr. Roe's comments.

On March 10, 2013, DAQ had published a public notice of a public workshop to be held March 25, 2013. At the workshop DAQ representatives addressed the Sierra Club comments and answered questions in an informal setting. At the workshop the DAQ announced that a public hearing would be held April 30, 2013, but due to public opposition this date was never published.

On April 28, 2013, DAQ had published a public notice of a June 4, 2013 public hearing, which also re-opened another public comment period for written comments that would end at the public hearing.

On May 30, 2013, the Department learned of a possible large turnout from the public and consequently change the hearing location from the smaller Delaware City Community Building to the Delaware City Fire Hall in Delaware City, which is located approximately 200 hundred yards from the Community Building and capable of holding approximately 200 persons. On the day of the public hearing, the Department posted signs at the Community Building location indicating the new location, and set up outdoor loudspeakers at the Fire Hall location to allow those who could not be seated to listen to the public hearing if the seating capacity was exceeded.



I presided over the public hearing, and public safety officials estimated that approximately 1,800 people showed up. This turnout largely was the result of Applicant's effort to transport supporters to the hearing based upon its 'Rally for the Refinery' outreach effort. Members of environmental groups also showed up. Despite the large turnout, all the persons who signed up to speak were provided the opportunity to speak by the 10 p.m. conclusion of the public hearing.

At the public hearing, I granted the Sierra Club's unopposed request for 30 additional days to submit written public comments, or until July 5, 2013.

The Department received email comments during this extended public comment period. Most of the emails were submitted by the Sierra Club on form emails, and three were from supporters of the Facility.

DAQ's experts provided the attached Technical Response Memorandum (TRM) dated April 25, 2013, which provides a detailed response to the public comments, including the EPA position on the Facility's limits that only became known to DAQ through early 2014 communications with EPA. EPA submitted its formal decision on the limits to DAQ in two letters both dated May 21, 2014, in which EPA established new limits at the Facility for two large sources of emissions. DAQ recommends including these limits in the Title V permit.

## **II. SUMMARY OF THE RECORD**

The record consists of 1) the Department's public hearing record, which contains a verbatim transcript of the public hearing and the documents introduced as exhibits,<sup>3</sup> 2) the post-hearing comments timely received during the extended public comment period, and 3) the documents identified in this Report. In addition, I also received technical assistance from

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<sup>3</sup> The Department develops a record at the public hearing in order to assist the public in making public comments. The Department further investigates and develops the record as it determines necessary to support the Secretary's final decision, but all information in the record and documents shall be identified and become the record of decision for any appeal.

AQMS's technical experts, Paul Foster, P.E., Program Manager, Engineering and Compliance Branch, and Ravi Rangan, P.E., who is primarily responsible to the Facility's air permits.

As noted above, an extraordinarily large number of persons attended the public hearing and I was required to limit the time for each public speaker to three minutes. In addition, speakers were required to leave the hearing room after speaking in order to allow others to enter and speak. Approximately 90 persons signed up to speak, but only approximately 50 spoke.

Mr. Foster, Mr. Rangan and Bruce Seltzer, DAQ's Title V consultant, attended the hearing and DAQ provided exhibits identified below:

- DNREC Ex. 1- May 22, 2012 DCR application submitted to DAQ;
- DNREC Ex. 2-September 19, 2012 DAQ letter to DCR determining application is complete;
- DNREC Ex 3-May 29, 2013 DAQ draft permit and technical support document;
- DNREC Ex. 4-May 29, 2013 DAQ Memorandum with Errata Changes to draft permit;
- DNREC Ex. 5-February 19, 2013 DCRC email comments on draft permit;
- DNREC Ex. 6-February 18, 2013 Delaware Chapter of Sierra Club letter from Amy Roe, Ph.D. Conservation Chair, commenting on draft permit and requesting a hearing;
- DNREC Ex. 7-February 21, 2013 email from DAQ Division Director Mirzakhilili to Dr. Roe that responded to the Sierra Club comments;
- DNREC Ex. 8-Email from United States Environmental Protection Agency (EPA) indicating that EPA would not be commenting on the draft permit;
- DNREC Ex.9-legal notices of the public hearing; and
- DNREC Ex. 10-DAQ's slide presentation.

Mr. Rangan made a presentation that explained the permit process, which he said entails consolidating all the Facility's air operation permits, issued pursuant to state authority under Regulation 1102, into a single Regulation 1130 Title V permit. He said that a Title V permit is a federally enforceable permit once approved by EPA. He noted that the Title V permit process provides the opportunity for comment from the public, EPA, and the adjoining states of Pennsylvania, Maryland and New Jersey. Mr. Rangan further explained that the Department has issued ten permits that are reflected in a renewed and updated Title V draft permit. Mr. Rangan described draft Title V permit's condition 3 as containing all the permits' emission limits, the compliance methods and procedures, including monitoring, testing and record keeping.

Dr. Roe, the conservation chair of the Delaware Chapter of the Sierra Club, spoke as the first public speaker and she raised the issue of the room's ability to hold all the potential speakers. She cited an Attorney General's opinion under the Freedom of Information Act that requires any Delaware agency that holds a public hearing should anticipate the size of the public who may attend a hearing and provide for suitable accommodations. Dr. Roe spoke of the public health risk from operating the Facility and that the draft permit is inadequate to protect the public health. She cited the specific reasons in her written comments and provided further document that was identified as Sierra Club Ex. 1. The Sierra Club comments may be summarized by the below issues:

- 1) The permit would result in increased air emissions as calculated from a comparison of the prior Title V permit issued in 2008;
- 2) The Department violated the requirement for a least 30 days public notice for a hearing on a Title V permit and failed to provide any public notice of several permit applications;
- 3) The Department violated the rail project limits for tank cars and the mobile emissions from such rail cars should be included in the Title V permit;
- 4) The rail yard expansion is an unlawful expansion of the industrial manufacturing operations outside of the approved Coastal Zone Act heavy industrial area;
- 5) The Facility should be required to minimize flaring;
- 6) The Facility has been cited numerous times for permit violations and should be designated as a chronic violator;
- 7) The Facility should have more air quality monitoring stations, including one along the fence line;
- 8) The Facility should have an updated emergency response plan;
- 9) The Facility's air emissions are harmful to the public health;
- 10) The Applicant has exercised intimidation tactics against the public;
- 11) The Facility should not receive an exemption from sulfur dioxide regulation;
- 12) The Facility should have its emissions during start up and shut down activity regulated;
- 13) The Facility's treatment of petroleum coke should be clarified and any export to China should be stopped; and
- 14) the Facility's National Pollutant Discharge Elimination System (NPDES) permit should be issued that require changing the open loop cooling water system to a closed loop cooling system.

She requested 30 day extension of the public comment period, which was granted and the public comment period for written comments was extended to July 5, 2013.

Michele Roberts, the co-coordinator of the Environmental Justice Health Alliance for Chemical Policy Reform, spoke next and claimed that the permit reflected increased air emissions. She also requested that the permit should be denied due to the health consequences from the Facility's air emissions. She also commented on the public hearing and the inability to hear from all public speakers and how the location had been changed three times in a week. Ms. Roberts' written statement was identified as Roberts Ex. 1.

The next speaker was Art Jensen, who stated he was a chemical engineer with 33 years of experience at various refineries and that he has worked at the Facility the past 21 months. He spoke of his experience at the Facility, and that he considers it to be a well-run operation and that there is a commitment to protecting the environment. His written statement was identified as Jensen Ex. 1.

Dave Champiny, a 20 year employee at the Facility, spoke in support of the issuance of the Title V permit. He commented on the positive changes that have occurred at the Facility and the improvements made to the pollution control equipment.

Lena Moffitt, an employee of the Sierra Club in Washington, DC., voiced her concern for global warming and climate change, which she considered was caused by use of carbon fuels such as those produced at the Facility. She also requested that the Facility's emergency response plan be amended with input from the community and posted on a web site. She also wanted a Facility wide reduction in air emissions and improved community relations with the Sierra Club.

Harry Gravelle spoke based upon his 32 year Building Trades Council membership since 1981, and his comments supported the Facility and its new owners.

Ken Gomeringer, the President of USW Local 4898 and as an employee at the Facility the past 23 years, spoke of the Facility's shutdown by its prior owner, Valero, and how the

current owner has invested over a billion dollars to restart operations. He asked the Department to reject those comments seeking to shut down the Facility or otherwise curtail its operations.

Rick McCorkle spoke next and his comments indicated that the Title V permit would result in increased emissions. He criticized the Department's regulation of the Facility and commented on the new railroad infrastructure was built to bring in tar sands crude oil, which he claimed is the dirtiest form of crude oil to use for refining. He further claimed that the railroad infrastructure was an unlawful expansion of the industrial footprint in the Coastal Zone as defined by the Coastal Zone Act. He also stated that the arrival of 200 rail cars per day violates any authorized level. He also commented on the Facility's history of permit violations and that the Department should designate the Applicant/Facility as a chronic violator. Finally, he commented on the NPDES permit that expired in 2002. He criticized the Department for not taking action to reduce the Facility's reliance on an open loop cooling system, which he claims is killing fish and other aquatic life. His written statement was identified as McCorkle Ex. 1.

Tom Godlewski, an employee in DCRC's environmental department, spoke next on the need for regulatory consistency and how the Facility now operates with the lowest air emissions in its 56 year history. He explained the changes that had air emission increases for some new operations that were offset by much larger decreases in other operations. He asked that the Department not consider the source of the crude oil that supplies the Facility, and reject the comments on ending the supply from tar sands regions. He noted that the Department's regulation entails what is emitted by the production process and that the Facility's air emissions are regulated by the same limits no matter what source of supply is used.

Courtney Lewis, a Sierra Club employee in Washington DC, spoke and her comments supported Sierra Club position. She commented on the attempt by some to portray the Sierra

Club's position as wanting the Facility to close and cost employees their jobs, which she claimed was not the Sierra Club's purpose.

Kristina Lynn, a Delaware City resident, spoke in support of the Sierra Club's position. She commented on the need for more real time air monitoring along the fence line. She commented on how the current email notice of permit exceedances is sent to her months after the release has occurred. She also commented on no notification of the railcar derailment that had occurred. She also complained of intimidation tactics that have been employed by law enforcement agencies towards some who sought information on the Facility. Her written statement is Lynne Ex. 1.

Mike Harrington, a 30 year employee at the Facility, spoke of being laid off in 2010 and how hard that was. He urges the Department to reissue the Title V permit without any changes requested by those who seek to shut down the Facility. His written statement was identified as Harrington Ex. 1.

Judy Winters spoke briefly and wanted the Facility to attain the highest standards possible.

Andy Woerner, a chemical engineer and partner in Environmental Resource Management consulting firm, spoke about an air quality study of the Delaware City area and that the three locations tested all had better air quality than state and federal benchmarks. He disputed that fence line air quality monitoring would provide any benefit over the existing air monitoring being conducted by the Department at the baseball fields that are generally downwind from the Facility.

Sparsh Khandeschi of the Washington DC based Environmental Integrity Project spoke on behalf the Sierra Club and first commented on the Title V permit's plant-wide applicability limits (PAL), which he considers should not be in a Title V permit. He also seeks that the draft

permit be changed so that it requires compliance with all federal New Source Review (NSR) requirements. His third change he sought was to require air monitoring that was sufficient to assure compliance with all air emission limits. His comments noted that the PAL was established in a settlement agreement when the Applicant purchased the Facility, which he said was not the subject of any opportunity for public comment and that this was a violation of federal law. His comments also addressed that the PAL for Nitrogen Oxide (NOx) emissions, which he claimed was not based upon any historical baseline, again as required by federal law. He commented on the use of several heaters that were not subject to annual stack testing as support for his recommendation for requiring more monitoring of air emissions. He also commented on the need to monitor flaring better. His prepared statement was identified as Khandeschi Ex. 1.

Steven Messick spoke next and his comments questioned the Facility's record for violations. He pointed out a large release in January 2013, and he wants the Facility to be classified as a chronic violator. His written statement is identified as Messick Ex. 1.

Kathryn Colarulli, a member of the Sierra Club, commented in opposition to the Facility's the use of crude from the tar sands regions, and how the refinery process causes health issues.

Jillian Farley spoke and her comments also were opposed to the Facility's use of tar sands crude, and the export of petroleum coke to China. Her written statement was identified as Farley Ex. 1.

Jerry Geimer spoke as an employee of the Facility who has had experience working at other refineries. His comments were on how much better the Facility was compared to other refineries.

Philip Barnes spoke in support of increased air monitoring, particularly of NOx and particulate matter, at the current ballpark location for air monitoring.

Robin Mann, the former President of the Sierra Club and currently a Sierra Club board member, stated on how the Sierra Club's worked to help improve conditions for workers and that she also opposed the use of crude oil from the tar sands as a step to improving the environment.

Earl Tate spoke on the need to clean up the environment

Megan McGovern spoke on how her asthma affects her life as a high school teacher and how she has never smoked but nevertheless has asthma like so many of her students. She supported stronger regulation and timely reporting of emissions.

Amber Whitehead, a 15 year old grandchild of an employee at the Facility, stated how her grandfather was able to support her family throughout the years because of his job.

Josh Jacobs spoke briefly in support of the Department's issuance of the Title V permit.

Vincent Ascione, the business representative of Operating Engineers Local 542, commented about the need for good paying jobs such as provided by the Facility.

George Hobb, a bricklayer who works at the Facility, supported the reissuance of the Title V permit.

Gail Heath spoke and her comments were on the health risk from air pollution. She was concerned with any increase in air pollution from the Facility.

Walter Yasiejko, a resident who lives 6 miles from the Facility and a chemical engineer, stated how he had taken a tour of the Facility and that he was very impressed with how clean it was. He supported working with the community groups to improve the environment and that the Title V permit should be reissued.

Ronald Killen spoke in favor of issuing the permit.

Doug Maloney, a resident of Delaware City, expressed his concern with not getting notifications promptly of problems, such as the train car derailment.



Debbie Heaton spoke in support of the conditions requested by the Sierra Club, namely improved monitoring, an improved emergency response plan and reductions in the air emissions.

Robert Carl, business manager for International Association of Heat and Frost Insulators and Allied Workers Local 42, supported the Facility as a source of good paying jobs.

Martin Willis spoke in support of the Facility and issuance of the Title V permit based upon his work there over the years. He commented on crude oil from tar sands, and how this source of crude should be used and was needed by everyone.

John Bland spoke briefly as the business agent of the Boilermakers Local 13 representing its 800 members, who support of the reissuance of the permit. He commented on the use of tar sands crude as being the same as the oil imported from other locations over the years.

William Moyer, a former regulator with the Department, spoke in opposition to the Title V renewal based upon a 2012 Sierra Club report entitled “Delaware City Refinery and Environmental Justice.” He also addressed the 36 page agreement between DCR and Delaware on re-opening the Facility. He commented on the delay in issuance of a renewed water permit and how the delay has allowed millions of fish and other aquatic life to be killed in the cooling water intake screens or by entering the cooling water system. He commented that the NPDES permit has been amended without public notice 24 times. His written statement is identified as Moyer Ex. 1

Stephanie Heron, a staff person for the Sierra Club, supported the Sierra Club position. She spoke about the concern for air quality that causes schools to cancel their field day events due to ozone alert days caused by excessive pollution.

Frank Hatzell, a former employee at the Facility and former Delaware City councilman, supported of the permit’s issuance.

Mark Martell, President of the Delaware Audubon Society, indicated that the Facility's management team had met with environmental groups and that the meetings were progress compared to the Facility's prior management. He indicated that the environmental concerns would result in more jobs at the Facility, such as constructing the cooling water towers that would be needed by any closed loop cooling system. He provided a written statement identified as Martell Ex. 1

Dave Carter spoke on the need for real time monitoring and how environmental improvements such as cooling water towers can increase the jobs at the Facility. His written statement was identified as Carter Ex. 1.

Matt DelPizzo spoke about the progress made in getting environmental improvements at the Facility. He stated that the pressure from the Sierra Club and Audubon Society was important to achieving the improvements.

Linda Watson, a resident of Delaware City, commented on the fact that her family did not have cancer, and that she resented this hearing.

Pauline Webster spoke in support of the Sierra Club position and that the permit should be denied.

Coralie Pryde spoke in opposition to the use of tar sands crude, which she claims has higher levels of hydrocarbons benzene and toluene. She provided a written statement identified as Pryde Ex. 1.

Bernie August spoke and his comments were on the destruction caused in the removal of tar sands crude from Northern Alberta Canada.

Josh Turner spoke about the need for the Facility to communicate better what is being done at the Facility.

Mabel Cole complained about the water in a pond at the Facility that was polluted. She also emailed a written statement that is identified as Cole Ex. 1.

Maureen Groves described how asthma has become so prevalent in her school where she is a teacher in Pennsylvania. She commented on the American Lung Association's grading of air quality in New Castle County and that it received an "F" for ozone and a "D" for 24 hour particle pollution.

Troy Nash, an employee of DCRC, spoke of how the Facility provided good employment.

William Dunn spoke on installing real time air quality monitoring equipment along the fence line. He cited his study of the cost, which was approximately \$25,000. He compared this cost to the Facility's hundreds of millions in quarterly profits reported.

Ellen Lebowitz's left before speaking but provided a written statement that was identified as Lebowitz Ex. 1, which raised the same issues as in the Sierra Club's position. In addition, written statements were received from New Jersey Environmental Justice Alliance, which included 19 pages of names totaling approximately 190 names of person mostly from Delaware who state their opposition to the permit renewal. NJEJA Ex. 1. R. Dale Simon submitted a written statement based upon his work at the Facility and his statement support issuance of the permit. Simon Ex. 1. The Reverend Timothy R. Woodruff submitted a written statement that commented on the air quality improvements undertaken by Houston, Texas refineries and wondered why the Facility was not also undertaking such improvements. He also cited his health issue from asthma that developed since he moved to Delaware in 1999. Woodruff Ex. 1. Sid Madison submitted a written statement opposing the permit renewal and commenting on the use of tar sands crude oil and raising the issues raised by the Sierra Club comments. Madison Ex. 1.

During the extended public comment period the Department received emails. Most of the emails were form emails sent by the Sierra Club. Three emails provided further support for Applicant's position as discussed above.

The record also shall include EPA's May 21, 2014 letter, which set limits for the Facility's Fluid Coking Unit (FCU). The EPA determined that the FCU 365 day rolling average Nitrogen Oxygen (NOx) limit should be 115.2 ppmvd and that the seven day rolling average limit should be 152.0 ppmvd. The new EPA limits were based upon EPA's review of the 'SNCR Optimization Study' dated May 25, 2007, and the 'FCU WGS Annual Concentration and Mass NOx Limit Proposal' dated July 28, 2008. These changes were made pursuant to Paragraphs 16, 17 and 169 in the Consent Decree in *United States of America, et al v. Motiva Enterprises, LLC, No. H-01-0978 (S.D. Tex.)* (Consent Decree). EPA's letter will be included in the record as EPA Exhibit 1.

The record also contains EPA's May 21, 2014 letter that set limits on the Facility's Fluidized Catalytic Cracking Unit (FCCU). EPA's limits were based on its review of 'FCCU NOx Emission Demonstration Study,' dated October 30, 2006. EPA determined the FCCU's NOx limits for the 365 day rolling average should be 100.7 ppmvd. EPA also determined that the seven day rolling average should be 137.0 ppmvd. These changes were based upon paragraphs 26, 27, and 169 of the Consent Decree. This EPA letter shall be identified as EPA Ex. 2.<sup>4</sup> DAQ recommends including these limits in federally enforceable Regulation 1102 permits, and that these requirements be included in the proposed permits being sent to EPA.

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<sup>4</sup> Of note, DAQ directly asked EPA whether it would comment on the draft permit and EPA's response that is in the record was that no comments would be submitted. EPA Exhibits 1 and 2, while not submitted as part for the Title V proceeding, nevertheless are binding on the Department and according should be in the record to support the final decision.

#### **IV. DISCUSSION OF FINDINGS AND REASONS**

The public hearing on the renewal of Applicant's Title V permit generated the largest participation at any Department public hearing, and well beyond any reasonable expectation. The Sierra Club cites an Attorney General Opinion that directs state agencies to accommodate the anticipated number of participants. I find that the Department complied with this directive based upon the extraordinary measures taken to move the hearing location and implement other last minute changes when it became apparent to the Department that an extraordinarily large crowd was anticipated. The hearing's procedures allowed persons to register to speak in advance and these speakers did speak first. All the persons who signed up to speak based upon the sign in sheet were called to speak, which means that all had the opportunity to speak. Moreover, there was ample opportunity to be heard in written comments based upon the initial 30 day notice period for the application and draft permit, the second 30 day public comment period that began with the public notice of the hearing, and finally the 30 day extension of the public comment period that was granted at the hearing. In sum, there was a total of 90 days for providing public comments in writing.

The vast majority of the participants were Applicant's supporters, which may be attributed to Applicant's 'Rally for the Refinery' outreach efforts.<sup>5</sup> The supporters of the Facility stressed the jobs that the Facility provided and how the Facility's operations have improved, particularly under the new ownership. The supported also sought no restriction on the source of the crude oil used in the Facility's refinery process, based in part on the opposition to the use of tar sands crude oil.

The public comments that seek to deny or otherwise significantly modify the draft permit and/or the Facility's operations are summarized as follows: 1) the Facility's air emissions should

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<sup>5</sup> The Sierra Club materials included a flyer for the Rally for the Refinery, and the Sierra Club also solicited participation by its members.

be reduced below the levels in the last Title V permit; 2) new air quality monitoring stations should be installed; 3) the emergency response plan should be revised; 4) the Facility's supply of crude oil from the tar sands regions should be reduced (preferably to zero); 5) the Department's should in the near term issue a NPDES permit that directs the Facility to use a closed loop cooling system; 6) the Facility should be regulated to reduce or prevent flaring and otherwise have pollution limits on starting up and shutting down equipment; and 7) the Department should take enforcement actions against the Facility based on its violations..

**1. The Title V permit will not authorize any increase in emissions over previously issued permits.**

The Sierra Club' comments as well as many others opposed a Title V renewal if the emissions limits were higher than in the existing permit. I find that the Title V permit will not authorize any increase in air emissions over the levels previously authorized in Department permits. Any change to lower the emissions limits already established in Department permits would be contrary to the law. A Title V permit is to consolidate previously issued permits, some issued solely under state authority, into a single federally enforceable permit. The increase in air emissions limits from the last Title V permit is based solely on the increases authorized in the ten permits reflected in the draft permit that were not in the currently effective Title V permit.

All of the ten permits were issued after full opportunity for public comment pursuant to the Department's public hearing process. The public comments that seek to impose no increase in emissions from the current Title V permit should not be adopted because then the Title V permit would not reflect the consolidation of the previously issued permit limits. I find that there was ample public notice and opportunity to be heard in opposition to any increased air emissions in the ten individual permits to be consolidated into the renewed Title V permit, which must reflect the limits established in the duly issued permits.

**2. The determination of whether another air quality monitoring station near the Facility should not be made in a Title V permit proceeding.**

I find that the issue of the air quality monitoring stations should not be considered as part of a Department decision on the renewal of a Title V permit. The Department undertakes air quality monitoring at various locations across the state. The Department also requires the Applicant to undertake air monitoring in the permits that are reflected in the Title V permit, and the air monitoring and reporting requirements are included in the Title V permit.

I find no support for a Department decision to require Applicant to undertake any additional air quality monitoring in a Title V permit that is not already authorized in a permit. Insofar as the comments seek the Department to undertake the air quality monitoring, then that is a matter that is outside of any Title V permit decision and I find no support for requiring that as part of a Title V permit. The Department's decision to install an air quality monitoring station at some location near the Facility in addition to the Department's use of one location near the Facility should only be made after considerable study of a suitable record. The record in this proceeding does not provide any scientific support for a new location. The selection of a new location, if needed, also would require the Department to obtain the necessary funding.

The public comments seek a new location along the fence line, but there is little factual foundation for this site. I agree with DAQ's assessment that such a location may not capture emissions from the 200' high smokestack. Moreover, the current air quality monitoring station at the ball field location is near the fence line and yet was designed to monitor air emissions from the smokestack. Thus, the Department's experts are satisfied that the Facility's air emissions are adequately monitored at the existing locations, including at the point of discharge where there may be continuous monitoring or at the Department operated location at the ball fields.

**3. The Emergency Response Plan should not be amended in a Title V proceeding.**

The third issue raised in the public comments was to seek changes to the Facility's emergency response plan. The DAQ TRM addressed this issue and found no need to change the existing emergency response plan. The Department periodically reviews the Facility's emergency plans, but based upon this record I see no support for any change in the plan at this time. To the extent the Department believes that public input may be helpful, and then the Department may consider such input when it does proposed a change to the plan. Again, I find that changing an emergency response plan in a Title V permit renewal proceeding is not the appropriate proceeding for such a change, but rather in each of the permits. The Title V permit should not be used to add any additional requirements that are not already in the issued permits.

**4. Facility's selection of crude to refine should not be regulated in a Title V proceeding.**

The issue of the Facility's selection of the sources of crude oil to refine was the subject of many public comments, which objected to the use of crude oil from the tar sands region based upon the environmental impact of obtaining such source of supply. The record contains DAQ's response as well as a response from the Applicant that basically states that the selection of the source of supply to be refined is not something that may be regulated in a Title V permit. I agree that the Title V permit regulates air emissions released by the Facility. The Department has no authority to regulate the Facility's business decisions that determine the selection of the source of crude oil to be refined from among the many sources. The Facility was designed to refine many sources including crude oil that other refineries were not designed to refine. Thus, the Department has no authority to interfere with the managerial decision on the sources of supply to refine unless the Facility's selection causes problems meeting the emission limits.



**5. The Department's permit for water discharges should not be regulated in a Title V permit proceeding.**

The many of the public comments criticized the Department for not acting to issue a NPDES permits to regulate better the Facility's surface water discharges. The comments seek a NPDES permit that would end the Facility's use of an open cooling system that they claimed harmed the environment. Initially there is the public perception that the Facility is operating without any valid NPDES permit. This is not legally correct. The Facility's NPDES permits were to expire in 2002, but before they did the Department received NPDES renewal applications. Pursuant to the Department's regulations, the receipt of a timely submitted NPDES permit renewal application automatically extends the expiration date of a permit until the Department makes a final decision on the renewal application. Thus, the Facility's water discharges are allowed under valid Department NPDES permits.

There is no basis to regulate water discharges in a Title V permit. Consequently, the comments are misplaced and should be raised in the upcoming NPDES permit proceeding that will soon be the subject of a Department public notice. The Department's delay in acting on the renewal application is partially explained by the constant litigation and hence uncertainty over the controlling EPA regulations, but this is a matter for the NPDES permit proceeding.

**6. The Title V permit regulates flaring and emissions from starting up and shutting down equipment.**

The public comments complained that the Department does not adequately regulate flaring and other emissions that may occur from starting and shutting down equipment. DAQ provided an explanation in its TRM that I accept, namely, that such releases are regulated by the Title V permit and may be subject to enforcement actions.

**7. The Title V permit proceeding record does not support any denial based upon enforcement actions taken or possible enforcement action that may be taken.**

The public comments seeking a denial of the renewal based upon the Facility's history of enforcement actions or possibly violations under the air permits or the Coastal Zone Act do not provide a sufficient record to support such action. The Department takes enforcement actions independently of a permit renewal application,. The record does not support any recommendation that would shutter the Facility for any past or ongoing violations. I rely on the experts in DAQ and they do not support such drastic action. I find that the Department's authority under the chronic violator law and Department regulations entails the exercise of the Department's enforcement discretion that should be based upon a record that has sufficient evidence to support such action, particularly with a recommendation from the Department's experts who closely monitor the Facility. Absent such a recommendation, I find the record does not support such a determination. I find that this Title V proceeding provides insufficient support for a recommendation for a chronic violator determination, which properly should be originated by the experts in the DAQ for action by the Secretary based upon a full investigation and record

Turning to the substance of the Title V permit, the renewal application and DAQ's draft permit reflect the consolidation of all the permits that are in effect for the Facility into one Title V permit. Consequently, except for minor revisions for errors, the Title V permit offers no change in the emissions previously authorized by permits that are reflected in the consolidation, as updated by the EPA NOx emission limits for the FCU and FCCU. The Department's approval will allow the permit to be submitted as a proposed permit to EPA for its further review and approval consistent with CAA procedures. I recommend that the Department not adopt the public comments that seek to deny or change the permit from the permit that DAQ recommends.

My finding and recommendation is that the Department's record supports issuing the Applicant the Title V permit for the Facility. This action is consistent with the Department's purpose to protect the environment. The Department's experts in DAQ provide a well-supported record for approving the proposed permit, which will be sent to EPA for its review and approval. The renewal of this Title V operating permit will reflect the important regulatory changes that have occurred since the last Title V permit was issued, and the renewed permit will allow the Department greater authority over the Facility than possible acting solely under its state authority. Thus, the Title V permit will improve the Department's ability to enforce its *Regulations* and the Title V permit conditions through a federally enforceable permit.

The Department last faced opposition to a Title V permit renewal when it issued the Title V renewal permit for NRG's Indian River Generating Station. In that decision, the Department also rejected denying the permit based upon public comments that raised issues with the water discharges and the total quantity of air emissions, which like this permit were already approved by prior issued permits. These permits include terms and conditions that require the use of pollution control equipment to reduce the air emissions to allowable levels, as determined by the Department and consistent with federal and state laws and regulations. The Department's experts have concluded that the Title V permit should be renewed and that it should reflect the requirements in the permits previously issued and the EPA requirements based upon EPA's decision on certain limits based upon studies required by the Consent Decree. Thus, the Title V permit proposed for EPA's review and approval meets the standards for such approval and issuance.

#### **IV. CONCLUSION**

In sum, the above discussion highlights some of the issues raised by the public comments and DAQ's TRM provides a comprehensive reply to the public comments. The administrative

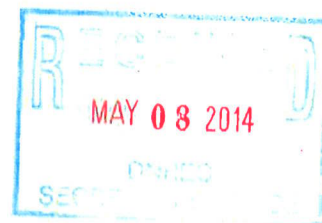
record and the Department's experts provide a record to support issuance of an order approving submitting a proposed permit, in the form prepared by AQMS as submitted to me, to EPA for its further review and approval. I recommend that the Title V renewal permit, as prepared by DAQ, should be issued.



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Robert P. Haynes, Esquire  
Senior Hearing Officer

## **MEMORANDUM**



TO: Robert Haynes  
Hearing Officer

THROUGH: Ali Mirzakhali, P.E. *RAA*  
*for* Division Director

Paul Foster, P.E. *TR*  
Program Manager

FROM: Ravi Rangan, P.E. *RR*

SUBJECT: **The Delaware City Refining Company  
Division of Air Quality's Response Document for the Public Hearing Held on  
June 4, 2013 for the Delaware City Refining Company's Draft Title V Permit  
Draft Permit: AQM-003/00016 – Parts 1, 2 and 3**

DATE: April 25, 2014

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### **Background**

On January 20, 2013, the Department's Division of Air Quality (DAQ) advertised a public notice that it had developed a Draft Title V Renewal Permit (the TV permit) for the Delaware City Refining Company (DCRC). The notice was published in Sunday News Journal and the Delaware State News and invited the public to review DCRC's application and the draft permit. The public notice period was open for 30 days.

The renewal permit incorporates the new applicable terms and conditions from ten Regulation 1102 permits covering eight process unit operations and four storage tanks issued since the last Title V permit revision in April 2011.

### **Review of Application and Public Hearing**

During the initial 30 day public review period of the application, DAQ received comments from two parties: the Delaware Chapter of the Sierra Club and DCRC. The Sierra Club's comments, submitted by Ms. Amy Roe, were received on February 18, 2013, and are noted as comments 1-SC through 6-SC in the table below. The letter also requested a public hearing be held on the application and draft permit. The refinery's comments, submitted by Mr. Thomas Godlewski, were received via email on February 19, 2013 and are numbered 7-DCRC through 9-DCRC in the table below.

DAQ held a public workshop on March 25, 2013 to describe the TV permitting process as it applies to the DE City Refinery. At this workshop, DAQ explained the elements of the developed draft Title V permit renewal for the refinery and received favorable feedback from several attendees that the workshop was a useful tool in bringing the public up to speed prior to the formal hearing. A public hearing was held in Delaware City on June 4, 2013, to receive comments on DAQ's draft permit. The hearing was attended by approximately 1,800 citizens representing the refinery as well as the environmental community. During the hearing, 50 persons offered testimony. The comments have been grouped into four categories: issuing the permit as is, issuing the permit with certain conditions, denial, and other general statements. Further explanation is as follows:

- Issuance of the Permit: 17 persons supported the renewal of DCRC's Title V permit without any

## **MEMORANDUM**

**The Delaware City Refining Company**

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- further conditions or requirements to be added. Many spoke in favor of the refinery, its improved operations, and the importance of having good-paying jobs.
- Issuance of the Permit with Conditions: 17 persons testified they supported the issuance of the permit but conditioned their support to the refinery enacting a various number of enhancements and improvements which would then be covered by the permit. Many of these persons spoke of supporting comments made by the Delaware Chapter of the Sierra Club.
  - Denial of the Permit: One person offered testimony directly opposing the renewal of this permit. That person cited the "egregious impacts of the toxics (i.e., VOCs, sulfur dioxide, ammonia, etc.) on human health and the environment" and that the refinery recently began processing heavy Canadian tar sands.
  - Other Comments: 15 persons gave testimony on various topics but did not clearly state their outright support for or against issuance of the permit. Most comments dealt with issues such as health concerns, jobs, pollution, and the Canadian tar sands.

These comments have been broadly grouped under 10-PUBLIC SUPPORT and 11-PUBLIC OPPOSE

The Environmental Integrity Project (EIP) represented by Mr. Sparsh Khandeshi made 3 comments. These comments and DAQ's responses are addressed in sections #12-EIP through #14-EIP.

The Delaware Chapter of the Sierra Club submitted a letter during the hearing with 24 points. Those comments are addressed in sections #15-SC through #38-SC in the table below.

Finally, the US EPA made one comment. This comment and DAQ's response is addressed in section # 39-EPA.

Additionally, because the record was left open for a 30 day period after the hearing, the Department set up an online repository ([DNREC.PublicComments@state.de.us](mailto:DNREC.PublicComments@state.de.us)) to receive additional comments during this open period. The Department received 3 additional comments in support of the renewal and 163 additional comments either opposing the renewal or requesting additional requirements and conditions inserted into the permit. After careful review of all the additional comments, DAQ has categorized the public comments under 2 broad categories, i.e., those supporting the Title V permit renewal and those opposing the Title V permit renewal. Comment #10-PUBLIC SUPPORT highlights 3 submittals received by the Department and Comment #11-PUBLIC OPPOSE highlights 3 submittals received by the Department.

Appendix "A" of this memorandum is the suggested "Proposed" permit that incorporates the Proposed Corrections detailed in the Memorandum titled Errata Changes to Draft Permit dated May 29, 2013 from Ravi Rangan to Paul Foster. This memorandum was included in DAQ's document package to the Hearing Officer on June 4, 2013.

This application by DCRC is for the renewal of the facility's TV permit. The TV permit is by definition an omnibus permitting program designed to bring in all applicable requirements into the body of a single operation permit. Thus, the TV permit is a dynamic instrument that is renewed periodically to ensure that it is up to date and inclusive of new changes. As noted above, DAQ received numerous comments with some supporting and others opposing renewal of this TV permit. DAQ acknowledges some of the comments are meritorious. To those comments, DAQ has provided in its reconciliation table reasoned explanations as to

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why it agrees or disagrees with a specific comment. On the other hand, DAQ responds to comments that cavil by noting that they are not germane to this permitting exercise. Appendix "A" contains the suggested Proposed TV permit renewal that includes all changes deemed meritorious. DAQ suggests issuing the permit in Appendix A to EPA Region III for their 45-day review of the proposed permit.

I hope this information will assist you in reviewing the issues and making your recommendation to the Secretary. Your patience in awaiting receipt of these responses is appreciated. If you have any questions, please call me at (302) 323-4542.

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| Comment Reference | Comment Summary   | Responses/Actions Taken by DAQ  |
|-------------------|---|---|
| 1-SC              | <p>The permit application describes the following changes to air emissions:</p> <ul style="list-style-type: none"><li>• Increase in Total Suspended Particulates by 29% (Page 186).</li><li>• Increase in Sulfur Dioxide emissions by 4.7% (Page 190).</li><li>• Increase in Carbon Monoxide emissions by 14.2% (Page 192).</li><li>• Increase in Volatile Organic Compound emissions by 12.3% (Page 192).</li><li>• Increase in Sulfuric Acid emissions by 17.2% (Page 194).</li><li>• Increase in Ammonia emissions by 15.9% (Page 194).</li><li>• Increase in Lead emissions by 33.3% (Page 195).</li></ul> <p>This permit application therefore proposes to dramatically increase the amount of pollution from the Delaware City Refinery. While the capacity of the refinery will stay the same, at 191,000 barrels per day, we question how the refinery would have the need to expand its allowable level of pollution by such large amounts. We are concerned about the hazardous nature of processes that are ongoing at the Refinery, which was built in 1956 and 1957, and the implications of these increases for deteriorating environmental conditions. We ask that the Refinery explain at a public hearing how pollution will increase when their refining capacity is not increasing by a corresponding amount. We ask that the refinery include any new fuels by rail that are providing the feedstock for refining processes, including Canadian tar sands, in these expanded air pollution emissions.</p> | <p>DAQ wants to clarify that this comment is based on a misunderstanding of the proceeding. This TV permit renewal does not authorize any new emissions increases. The emissions increases referred to in Comment #1-SC are attributable to the Bin 1 Project. The Bin 1 Project, also known as the DCRC Upgrade and Optimization Project, was undertaken by Valero, the former owner of the Delaware City Refinery in 2008 as part of their overall strategy to optimize refinery operations. While the Bin 1 Project had refinery wide ramifications, the two primary affected unit operations were the crude unit (CU) and the fluid coking unit (FCU). The resulting emissions changes to the FCU are the emissions changes identified in Comment #1-SC.</p> <p>The Bin 1 Project did not trigger non-attainment NSR. But it triggered PSD NSR review for the sulfur dioxide emissions increases. The project did not trigger PSD NSR for any other pollutants either because the increases were less than the significance or because the facility was able to net out of PSD review.</p> <p>Because the project triggered PSD review for SO<sub>2</sub>, the permitting exercise was carried out pursuant to the provisions of 7 <b>DE Admin. Code</b> 1125. Draft permits were made available to the public and a hearing was held on August 18, 2008. Construction permits were issued on September 8, 2008.</p> <p>Upon completion of the modifications authorized by the Bin 1 Project construction permits, operation permits were issued on September 7, 2011.</p> <p>As part of the current renewal of the facility's Title V permit, DAQ is simultaneously making a significant permit modification to incorporate the Bin 1 project operation permit conditions along with several other recently issued 7 <b>DE Admin. Code</b> 1102 permits. It is noteworthy that this incorporation does not itself allow the emissions increase. Any emissions changes were already authorized as part of the permitting steps ending in issuance of the operation permits mentioned above on September 7, 2011. The current permitting action only moves the current limits from the individual operation permits into the</p> |



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| Comment Reference | Comment Summary  | Responses/Actions Taken by DAQ   |
|-------------------|--|--|
| 2-SC              | <p>The increase in pollution is of particular concern as the area surrounding the refinery has already been identified as a census tract of high cancer risk. According to the Centers for Disease Control and Prevention and the Department of Health and Social Services, the area of surrounding the refinery is a high cancer census tract.</p> <p>Age-Adjusted Cancer Rates per 100,000 people:<br/>United States = 465.1<br/>State of Delaware = 517.0<br/>Delaware City's Census Tract = 680.5</p> <p>The relationship between air pollution from the Delaware City Refinery has not been addressed in this permit application, which instead proposes to increase harmful air pollutants. Such an extraordinary expansion in air pollution, including known human carcinogens, metals and toxic chemicals, without a corresponding implementation of air pollution monitoring at the fence line of the Refinery and in residential communities, should be discussed comment in a public hearing.</p> | <p>facility-wide Title V permit.</p> <p>As mentioned above in our response to Comment #1-SC, this permitting action does not itself allow the emissions increase. Any emissions changes were already authorized as part of the permitting steps ending in issuance of the operation permits mentioned above on September 7, 2011. The current permitting action only moves the current limits from the individual operation permits into the facility wide Title V permit.</p> <p>While DAQ is cognizant of the numerous comments made with regard to fence-line monitoring around the DE City refinery, it is pertinent to evaluate this comment in the context of the State's existing monitoring infrastructure. The U.S. EPA has developed siting requirements for each of the "criteria" air pollutants. Delaware has had air monitoring sites located around the state since the late 1960s. The original focus of the monitoring network was on monitoring close to "point" sources (large facilities with high emissions). DNREC has an air monitoring station on Rt. 9 adjacent to the baseball field at the Delaware City ballpark that presently monitors CO, SO<sub>2</sub>, VOCs (including some carcinogens) and PM<sub>2.5</sub> pollutant levels for Delaware City. The location of this monitoring station is in accordance with federal requirements and guidelines and is providing quality assured data. Federal guidance include considerations such as the purpose of the monitoring (representative ambient concentrations, maximum source impact, etc.), the pollutant or pollutants to be monitored, the population density, location of other monitoring stations (including those in other states) and operational efficiency. Federal siting requirements include distance from trees, buildings and roadways, distance from major point sources, and height of the sampler probe or inlet. Other factors include site security and access, availability of electricity and telephone service, aesthetics and local zoning issues, and long-term (+10 years) site availability. Furthermore, because the emissions from the refinery's major emission sources occur from tall stacks (over 200 feet), a receptor located at the facility's fence line will most likely not represent maximum concentration or a measure of exposure. Finally, the primary requirement of the TV permitting program is to</p> |

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|                   |  | provide all applicable requirements in a single operation permit. Fence line monitoring around the perimeter of the DE City Refinery is not an applicable requirement as defined by 7 <b>DE Admin. Code</b> 1130. For all of the above reasons, DAQ disagrees that fence line monitoring be included as a permit condition in this Title V permit renewal. Every applicable requirement in the permit has an associated compliance methodology and monitoring/record keeping requirement. The permit relies on measuring compliance at the emission unit by periodic or continuous direct or surrogate monitoring rather than assess compliance by fence line monitoring.  |
| 3-SC              | Since January 2011, and under the new ownership of PBF, the Delaware City Refinery has violated its air permits 36 times. These individual violates are detailed in the table below. As the Delaware City Refinery is unable to meet the conditions of its existing permits, we question the permitting process for this new Title V permit, and ask that these permit violations be addressed in a public hearing.  | DAQ notes that Comment #3-SC merely lists the various violations as listed in the Department's listing of issued NOV's and asks that the documented violations be addressed in the context of a public hearing on the Title V permit's renewal application. Violations are addressed as part of the Department's enforcement process which is separate from operating permit renewal process under Title V. The Department has issued an Administrative Order to the refinery which addressed a number of the listed violations and imposed penalties for those violations.  |
| 4-SC              | <p>The refinery is a known polluter and we have asked DNREC to assign the refinery "chronic violator status." In 2011, SB 92 w/ HA 1 revised Title 7 Chapter 79 of the Delaware Code for DNREC's chronic violator program and clarified definitions, standards and criteria, and updated DNREC's authority. Since January 2011 and under the ownership of PBF, the Refinery has had 48 DERNS notifications for pollution releases, the most recent of which was this morning, February 18, 2013. These releases are detailed in the table below.</p> <p><i>[DAQ comment – this table has been omitted for brevity]</i></p> <p>DNREC has not yet revised its chronic violator regulations or initiated the regulatory rule-making process to bring them</p> | DAQ disagrees with Comment #4-SC. DAQ has the dual responsibility of issuing permits as well as initiating enforcement action when necessary to address non-compliance issues. But these responsibilities are separate and distinct from one another. Indeed, DAQ has reviewed, and will continue to review all instances of non-compliance, including those listed in Comment #4-SC, and evaluate each such instance for potential enforcement action. Therefore, while DAQ is cognizant of the Chronic Violator Regulation as being a potent tool in its enforcement arsenal, it does not view this regulation as having any bearing on the issuance of a permit, until the facility in question has been determined to be a chronic violator after due process. |

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| Comment Reference | Comment Summary  | Responses/Actions Taken by DAQ   |
|-------------------|--|--|
|                   | up to date with the recent revisions to the Delaware Code. We question the process of DNREC proceeding with a new air pollution permit for the Delaware City Refinery, while it has not taken action on regulations for chronic violator status. We ask that DNREC provide this information at the public hearing, and include a timeline for chronic violator regulatory rule-making.   |  |
| 5-SC              | The cooling needs of the Refinery that result from this air permit have not been addressed in the application. On August 31, 2002, the Clean Water Act NPDES permit for the Delaware City Refinery expired, and the amount of aquatic life destroyed by the refinery's once-through cooling system is well documented in numerous reports. The permit application fails to address the impact of the Refinery's operations on its cooling water needs. We ask DNREC to consider how this permit application will impact the Delaware River and at-risk aquatic species. The cooling needs of this air permit should be discussed at a public hearing.  | This permitting action pertains to the renewal of the facility's Title V permit which is an air permit issued in accordance with 7 DE Admin. Code 1130. The cooling water needs of the Delaware City Refinery and the NPDES permit fall under the purview of the Water Program administered by the Department's Division of Water Resources. Therefore, DAQ does not find this comment to be germane to this permitting action.  |
| 6-SC              | DNREC has not adequately distributed the Title V Permit Application. Upon our request to examine the Title V permit application and permit under review, the following pages of the permit have been provided by Ms. Laura Bogus on January 30, 2013: Page 35, 36, 29, 171-198, 204-220, and 245-251. Our request on February 1, 2013 for the remainder of the Title V permit has not received a response from the Department. We therefore request that at least <u>60 days</u> prior to the public hearing, the full Title V permit, including the application for changes, be made available to us in electronic form to provide us with an opportunity to review the document in its entirety. | Comment #6-SC stating that the Sierra Club has not been provided all pages of the application is incorrect. The relevant pages appended to the application are those pages where the applicant has noted changes. All other pages remain unchanged. The Sierra Club was informed in an e-mail dated February 21, 2013 from Ali Mirzakhilili to Ms. Amy Roe that should the Sierra Club wish to see the original permits in their entirety, DAQ would be happy to provide instructions on how to obtain them online or email a copy. The Sierra Club was unresponsive to DAQ's offer. |

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| <b>Comment Reference</b> | <b>Comment Summary</b>  | <b>Responses/Actions Taken by DAQ</b>   |
|--------------------------|---|---|
| 7-DCRC                   | Part 1 – fe.1.ii.A – the language of this permit does not match the language of the underlying cited regulation. To avoid any confusion as to the compliance obligation imposed, we would request changing the language to match the exact language found in the underlying regulation and specifically cite the three distinct periods listed in 40 CFR 63.119(b)(1) in which the floating roofs are not required to be floated on the liquid surface. (The regulation is detailed here).  | The exact language of 40 CFR 63.119(b)(1) has been inserted.  |
| 8-DCRC                   | Part 1 – Section jc of the permit contains a large number of "boilerplate" type requirements for the facility's NOx Cap (PAL). Most of these new requirements are neither "applicable requirements", as that term is defined by Regulation 30, nor are they conditions required by Section 6 of regulation 30. As such, these conditions are unnecessary as not required or supported by applicable law. 40 CFR 52.21(aa) contains a number of provisions that impose certain obligations on a permittee under certain conditions without requiring that these obligations be included as permit conditions. In fact, 40 CFR 52.21(aa)(7) enumerates in subsections (i) through (x) what is required to be contained within the PAL. Despite the fact that a number of these obligations are not necessarily applicable to current operations at the DCRC, DNREC has restated these regulatory provisions and included them as additional compliance conditions. DCRC has no ability to certify actual compliance with conditions that impose obligations upon hypothetical future conditions; nor does DCRC have the ability to certify compliance with conditions that dictate how DNREC would respond to such hypothetical future conditions. Accordingly, these conditions are vague, unnecessary and not required or supported by applicable | DAQ concurs that Part 1 Condition 3 – Table 1.jc of the permit contains a number of "boilerplate" type requirements for the facility's NOx Cap (PAL). However, DAQ disagrees that these boilerplate requirements are neither "applicable requirements", as that term is defined by 7 <b>DE Admin. Code</b> 1130, nor are they conditions required by Section 6 of 7 <b>DE Admin. Code</b> 1130. Indeed, as the heading for Table 1.jc states, this permit condition provides a Plant-wide applicability test for New Source Review purposes that has been reviewed in conjunction with the US EPA and been applied to other PAL permits issued by the State of Delaware. Therefore, DAQ is not deleting these conditions. |

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|                   | law. These conditions include items 6.3, 6.4, 6.5, 6.6, 5, 7, 8, 11 (the second Condition 11).   |  |
| 9-DCRC            | <p>In addition to the general comments listed above regarding Section jc, we offer the following specific comments:</p> <ul style="list-style-type: none"><li>• Condition 6.2 contains "DATE and DATE" as placeholders for actual dates. Please ensure actual dates are entered into the final version.</li><li>• Condition 10 mistakenly refers to Condition 9.1 and 9.2 rather than 10.1 and 10.2</li><li>• Condition 11 mistakenly refers back to Condition 9 rather than Condition 10.</li><li>• There are two Condition 11's.</li></ul>   | DAQ will insert the actual dates in the final permit and the cross-references and number has been corrected. |
| 10-PUBLIC SUPPORT | <p>The March of Dimes Delaware wrote, "The refinery has proven to be a good corporate citizen and is an integral partner in the work of the March of Dimes community. By not approving the permit request The March of Dimes Delaware Chapter would lose a significant and valuable partner."</p> <p>Mr. N. Snook wrote, "We have this issue coming up with permits, and as far as I'm concerned the refinery already has the permits and wants to bundle them. Where is the problem?... As like any place of business I'm sure we can continue to improve our cleanliness to the environment and other green efforts but they are continuing to work on this now... Please approve the permit for the Delaware City oil refinery and save Delaware's economy and way of life."</p> <p>Mr. J. McDaniel wrote "Since the restart, the environmental record of the refinery has probably been the best ever. With the company's decision to not restart the gasifier, carbon dioxide emissions are down. The employees</p> | DAQ has no comment.  |

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|                         | are committed to operating the refinery in a safe and responsible manner. I read an article the other day on line by an environmentalist that questioned, "Does it always have to be jobs versus the environment". No, I think these 2500 refinery and related jobs and the estimated 100 million dollars in yearly tax revenue can exist while working within the parameters of the law.  |   |
| 11-<br>PUBLIC<br>OPPOSE | <p>Raggedypearl wrote: "My husband and I moved to Delaware City 3 years ago. The stinking refinery was closed when we moved there. We fell in love with the little Town of Delaware City, and it was great returning to an area where I spent part of my childhood. I rode my bike all over town, by myself and with my Grand Sons... Then the refinery "restarted". It was hell after that. I remember the first time they terrible odors came into our home... My throat burned, I coughed, my eyes burned and watered. It was nauseating. My husband had to use an inhaler to breath. We had to close the windows and stay inside when these accidents happened. Time and time again... It was disgusting. We moved away from Delaware City last year. Away from being near our Grand Sons. And it cost us thousands of dollars.</p> <p>Ms. L. Howard wrote: "As a concerned U.S. citizen, I think PBF Energy should not export the petcoke generated by Delaware Refinery. Shipping petcoke to China represents a significant investment of petrochemical fuel not to mention the risk of spills while in transit. Instead, PBF Energy should form a partnership with the University of Delaware and conduct research regarding bio-remediation of petcoke using bacteria, fungi, and plants to decrease the threat petcoke poses to our natural environment."</p> | These comments are common to the comments submitted by the Sierra Club and over 120 other citizens. DAQ has addressed these comments later in this table. |

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|                          | <p>Ms. E. Van Alyne wrote "Since I showed up at the permit hearing and was not allowed in to comment, I am writing to let you know the things I would like in order for the refinery to receive a new Title V Permit are:</p> <ol style="list-style-type: none"><li>1. Real-time air quality monitoring at the fenceline and in residential neighborhoods (that run continuously and can be accessed online).</li><li>2. Increased safety measures to prevent flaring and pollution.</li><li>3. A reduction in air pollution emissions, not an increase.</li><li>4. An NPDES permit within a reasonable time frame (months).</li><li>5. Accountability for the mobile emissions of the train cars (diesel train engines, off-gassing)</li><li>6. An adequate and easily accessible Emergency Response plan and evacuation plan in case of a major incident.</li><li>7. Pollution limits to be put in place for equipment start-up and shut down."</li></ol> |   |
| 12-EIP                   | <p>There are two amendments that I would like to see DNREC make to the Title V permit, and that is --one is ensure that it complies with all Federal NSR requirements. And two, that all monitoring in the permit -- or the permit be amended to require monitoring that is sufficient to assure compliance with all emission limitations in the permit. With regards to complying with Federal NSR requirements, the Title V permit incorporates a plant-wide applicability limit, a PAL, that is impermissible and not authorized under the Clean Air Act. DNREC has never submitted a state implementation plan that requests authorization from the</p>   | <p>DAQ disagrees with EIP-1 that the Title V permit incorporates a plant-wide applicability limit, a PAL, that is impermissible and not authorized under the Clean Air Act. DAQ acknowledges that the PAL was created as a result of an Agreement between the Department and PBF Energy in 2010 when PBF Energy acquired the DE City Refinery from Valero. DE Regulations do not prohibit PALS and regulatory support for PALS exists in Delaware's SIP approved 7 <b>DE Admin. Code 1125</b>. Delaware's authority to issue PALS comes from a reasoned interpretation of 7 <b>DE Admin. Code 1125</b>, which defines Actual Emissions as:</p> <p><i>"Actual Emissions" means the actual rate of emissions of a pollutant from an</i></p> |

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|                   | <p>EPA to issue PAL permits or implement PAL limits. The PAL was created by a settlement agreement between the State and the facility and it was not subject to public comment and it was not -- there's no permit application for the public to review. So there was no opportunity for meaningful public participation, as Federal law requires. The second issue is that, as Federal law requires, a PAL must be based on the baseline emissions of the facility. There is no showing in the public records that the NOx PAL limit is based on the historical baseline of the facility. And so, that is what I would like to say about the PAL.</p> | <p><i>emission unit, as determined in accordance with the three subparagraphs below.</i></p> <ul style="list-style-type: none"><li><i>• In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The Department shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.</i></li><li><i>• The Department may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.</i></li><li><i>• For any emissions unit, which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.</i></li></ul> <p>The second bullet in the definition indicates "the Department may presume that source-specific allowable emissions for the unit are equivalent to actual emissions of the unit." Therefore, under 7 <b>DE Admin. Code</b> 1102 we set a very stringent source specific allowable emissions limit (i.e., an emission cap) that covers all NOx emissions in an 1102 permit. We then include in the permit PAL type provisions that indicate review under 1125 is not triggered so long as the cap is not exceeded (i.e., so long as actual emissions remain below allowable emissions -- which stems from our reasoned interpretation of the definition of actual emissions in 1125). We also include necessary monitoring, recordkeeping and reporting provisions, and provisions that subject all new/modified units since the establishment of the cap to review under 1125 before any relief from the cap is ever considered. Public and EPA review of the permit is provided for before it is issued. This is the same legal basis DNREC used to issue previous PALs, including one cited as a model by EPA in crafting</p> |



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|-------------------|--|--|-----------------|--|-------------------|--|--|--|-----|-----|-----------------|----|-------------------|------|--------|--------|--------|--------|--------|------|-------|--------|-------|-------|-------|------|----------|--------|--------|----------|--------|------|----------|--------|----------|----------|--------|------|----------|--------|----------|----------|--------|------|----------|--------|-----------|----------|--------|------|----------|--------|-----------|----------|----------|------|----------|--------|-----------|----------|----------|------|----------|--------|-----------|----------|----------|------|----------|--------|-----------|----------|--------|
|                   |  | <p>its PAL regulation.</p> <p>A comparison of this refinery PAL to what it would look like if Delaware followed the federal PAL provisions would clearly show this PAL is environmentally superior to the federal PAL provisions.</p> <p>Below is a table of historical emissions for the refinery, and a comparison of the Delaware PAL versus what a federal PAL would look like.</p> <p>The data in the table below is from our annual emissions inventory. The refinery did not operate at full capacity during the last few years so we compiled data back to 2002 to show a more complete picture of how emission have changed over time.</p> <table><tr><th rowspan="2">Year</th><th colspan="5">Delaware City Refinery Emissions (TPY)</th></tr><tr><th>NOx</th><th>VOC</th><th>SO<sub>2</sub></th><th>CO</th><th>PM<sub>2.5</sub></th></tr><tr><td>2011</td><td>1071.5</td><td>139.36</td><td>333.17</td><td>617.33</td><td>261.45</td></tr><tr><td>2010</td><td>61.77</td><td>173.63</td><td>54.98</td><td>22.99</td><td>11.64</td></tr><tr><td>2009</td><td>1,786.94</td><td>444.04</td><td>726.16</td><td>1,500.73</td><td>480.83</td></tr><tr><td>2008</td><td>2,524.68</td><td>596.88</td><td>2,547.57</td><td>1,760.12</td><td>446.46</td></tr><tr><td>2007</td><td>2,838.91</td><td>640.68</td><td>2,844.09</td><td>2,614.13</td><td>560.19</td></tr><tr><td>2006</td><td>2,921.55</td><td>334.47</td><td>25,955.54</td><td>3,048.23</td><td>942.27</td></tr><tr><td>2005</td><td>2,963.09</td><td>824.88</td><td>26,476.13</td><td>4,021.36</td><td>1,039.54</td></tr><tr><td>2004</td><td>3,459.55</td><td>698.08</td><td>27,553.81</td><td>9,692.26</td><td>1,653.52</td></tr><tr><td>2003</td><td>3,403.77</td><td>596.25</td><td>34,149.81</td><td>6,448.09</td><td>1,098.37</td></tr><tr><td>2002</td><td>3,554.62</td><td>828.91</td><td>34,096.48</td><td>3,857.94</td><td>904.04</td></tr></table> <p>Regarding the Delaware PAL versus what a federal PAL would have looked like – it's Delaware at 1,650 tons versus federal at 3,480 tons.</p> | Year            | Delaware City Refinery Emissions (TPY) |                   |  |  |  | NOx | VOC | SO <sub>2</sub> | CO | PM <sub>2.5</sub> | 2011 | 1071.5 | 139.36 | 333.17 | 617.33 | 261.45 | 2010 | 61.77 | 173.63 | 54.98 | 22.99 | 11.64 | 2009 | 1,786.94 | 444.04 | 726.16 | 1,500.73 | 480.83 | 2008 | 2,524.68 | 596.88 | 2,547.57 | 1,760.12 | 446.46 | 2007 | 2,838.91 | 640.68 | 2,844.09 | 2,614.13 | 560.19 | 2006 | 2,921.55 | 334.47 | 25,955.54 | 3,048.23 | 942.27 | 2005 | 2,963.09 | 824.88 | 26,476.13 | 4,021.36 | 1,039.54 | 2004 | 3,459.55 | 698.08 | 27,553.81 | 9,692.26 | 1,653.52 | 2003 | 3,403.77 | 596.25 | 34,149.81 | 6,448.09 | 1,098.37 | 2002 | 3,554.62 | 828.91 | 34,096.48 | 3,857.94 | 904.04 |
| Year              | Delaware City Refinery Emissions (TPY) |  |                 |  |                   |  |  |  |     |     |                 |    |                   |      |        |        |        |        |        |      |       |        |       |       |       |      |          |        |        |          |        |      |          |        |          |          |        |      |          |        |          |          |        |      |          |        |           |          |        |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |        |
|                   | NOx                                    | VOC  | SO <sub>2</sub> | CO                                     | PM <sub>2.5</sub> |  |  |  |     |     |                 |    |                   |      |        |        |        |        |        |      |       |        |       |       |       |      |          |        |        |          |        |      |          |        |          |          |        |      |          |        |          |          |        |      |          |        |           |          |        |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |        |
| 2011              | 1071.5                                 | 139.36   | 333.17          | 617.33                                 | 261.45            |  |  |  |     |     |                 |    |                   |      |        |        |        |        |        |      |       |        |       |       |       |      |          |        |        |          |        |      |          |        |          |          |        |      |          |        |          |          |        |      |          |        |           |          |        |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |        |
| 2010              | 61.77                                  | 173.63   | 54.98           | 22.99                                  | 11.64             |  |  |  |     |     |                 |    |                   |      |        |        |        |        |        |      |       |        |       |       |       |      |          |        |        |          |        |      |          |        |          |          |        |      |          |        |          |          |        |      |          |        |           |          |        |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |        |
| 2009              | 1,786.94                               | 444.04   | 726.16          | 1,500.73                               | 480.83            |  |  |  |     |     |                 |    |                   |      |        |        |        |        |        |      |       |        |       |       |       |      |          |        |        |          |        |      |          |        |          |          |        |      |          |        |          |          |        |      |          |        |           |          |        |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |        |
| 2008              | 2,524.68                               | 596.88   | 2,547.57        | 1,760.12                               | 446.46            |  |  |  |     |     |                 |    |                   |      |        |        |        |        |        |      |       |        |       |       |       |      |          |        |        |          |        |      |          |        |          |          |        |      |          |        |          |          |        |      |          |        |           |          |        |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |        |
| 2007              | 2,838.91                               | 640.68   | 2,844.09        | 2,614.13                               | 560.19            |  |  |  |     |     |                 |    |                   |      |        |        |        |        |        |      |       |        |       |       |       |      |          |        |        |          |        |      |          |        |          |          |        |      |          |        |          |          |        |      |          |        |           |          |        |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |        |
| 2006              | 2,921.55                               | 334.47   | 25,955.54       | 3,048.23                               | 942.27            |  |  |  |     |     |                 |    |                   |      |        |        |        |        |        |      |       |        |       |       |       |      |          |        |        |          |        |      |          |        |          |          |        |      |          |        |          |          |        |      |          |        |           |          |        |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |        |
| 2005              | 2,963.09                               | 824.88   | 26,476.13       | 4,021.36                               | 1,039.54          |  |  |  |     |     |                 |    |                   |      |        |        |        |        |        |      |       |        |       |       |       |      |          |        |        |          |        |      |          |        |          |          |        |      |          |        |          |          |        |      |          |        |           |          |        |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |        |
| 2004              | 3,459.55                               | 698.08   | 27,553.81       | 9,692.26                               | 1,653.52          |  |  |  |     |     |                 |    |                   |      |        |        |        |        |        |      |       |        |       |       |       |      |          |        |        |          |        |      |          |        |          |          |        |      |          |        |          |          |        |      |          |        |           |          |        |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |        |
| 2003              | 3,403.77                               | 596.25   | 34,149.81       | 6,448.09                               | 1,098.37          |  |  |  |     |     |                 |    |                   |      |        |        |        |        |        |      |       |        |       |       |       |      |          |        |        |          |        |      |          |        |          |          |        |      |          |        |          |          |        |      |          |        |           |          |        |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |        |
| 2002              | 3,554.62                               | 828.91   | 34,096.48       | 3,857.94                               | 904.04            |  |  |  |     |     |                 |    |                   |      |        |        |        |        |        |      |       |        |       |       |       |      |          |        |        |          |        |      |          |        |          |          |        |      |          |        |          |          |        |      |          |        |           |          |        |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |          |      |          |        |           |          |        |

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|                   |   | <ul style="list-style-type: none"><li>• Delaware PAL:<ul style="list-style-type: none"><li>◦ The initial PAL was set at 2,525 tons – actual 2008 emission's levels. 2008 represented the lowest level of full year NO<sub>x</sub> emissions from the refinery, and provided a significant reduction relative to Delaware's 2002 ozone SIP baseline (i.e., the baseline for the 1997 ozone standard).</li><li>◦ The final PAL was set at a level of 1,650 tons, beginning in 2015. This step-down provides an additional significant reduction to aid in the attainment and maintenance of the 2008 ozone standard (Delaware's attainment date for the 2008 standard is in 2015).</li></ul></li><li>• If the federal procedures had been followed to set a PAL:<ul style="list-style-type: none"><li>◦ The initial PAL would have been set at 3,480 tons – the highest consecutive 24-month period during the prior 10-years. Since the PAL was established in 2011, this 10-year look back period would have comprised 2002 through 2011.</li><li>◦ The PAL would have been set for a term of 10-years, with renewal at a higher level possible.</li></ul></li></ul> <p>DAQ also disagrees with EIP's assertion that the PAL was not subject to public comment. DCRC had submitted a permit application for a Significant Permit Modification on August 15, 2010. DAQ developed a draft permit and legal noticed its availability for public review on January 30, 2011 for a period of 30 days. The Department received no requests for a public hearing. Upon receiving no adverse comments on the proposed permit from the US EPA, a final permit was issued on April 5, 2011. This proceeding simply incorporates the existing PAL into the Title V Provision and does not adopt a new PAL.</p> |
| 13-EIP            | With regards to monitoring that is sufficient to assure compliance, first there is the PAL limit, and if that PAL limit is in fact valid, there must be additional monitoring at the refinery to assure compliance with that limit. | DAQ disagrees. There are 52 NO <sub>x</sub> emitting point sources in the refinery. Collectively these sources represent a maximum heat input of 8531 mmBtu/hour. On a heat input basis, NO <sub>x</sub> emissions resulting from emissions units totaling 7097 mmBtu/hour are monitored by Continuous Emissions Monitoring Systems (CEMS), i.e., 83.2 %. Annual stack tests are required for   |

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|                          | <p>The refinery has several heaters that do not require -- that currently are not required to do annual stack testing. And there's no way to assure that the emissions from those heaters is actually what the refinery is stating it is without annual stack testing.</p> <p>Therefore, we are requesting that DNREC amend the Title V permit to require tests in each heater to which the PAL applies, or in the alternative, annual stack testing done at representative conditions for the intensity or load rate of that heater.</p>  | <p>units totaling 727 mmBtu/hour (8.5 %) and NOx emissions from the remaining units are based on fuel usage, fuel quality and representative emissions factors. Other affected units require stack testing on a periodic basis in accordance with all applicable regulations. Thus, 92 % of refinery NOx emissions are monitored by either CEMS or an annual stack test. Furthermore, because the regulatory standard of performance for CEMS are to sample, analyze, and record data every fifteen minutes while the emission unit is operating, DAQ has incorporated an additional measure of quality assurance by specifying that at a minimum, the CEMs shall capture a minimum of 90% of the operating data each month or 95% of the operating data each quarter. DAQ is convinced the draft permit provides an adequate mechanism to ensure compliance with the NOx PAL.</p>  |
| 14-EIP                   | <p>With regard to flares, the refinery must improve its flare monitoring. Flares are assumed to have a 98 percent destruction efficiency or 99 percent combustion efficiency. This is not the case. It's been shown through several EPA tests in studies across the country.</p> <p>To remedy the situation, the refinery must install gas chromatographic monitoring at the inlet of the flare to measure the VOC and other components going into the flare, a flow meter to measure the total volume of gas going to the flare. Additionally, a wind meter and steam controls. This will help the refinery assure that the flare is not being oversteamed and that 98 percent combustion efficiency is being achieved at the flares, and excess emissions are not being dumped into the environment.</p> | <p>While DAQ is cognizant of EPA's on-going efforts to improve the efficiency and efficacy of flare systems, DAQ disagrees with the EIP's comment that the refinery must improve its flare monitoring. DAQ's approach to ensuring minimization of flaring practices is amongst the most stringent in the nation. This is because DAQ's draft permit, while it allows operation of the flare to safely combust and dispose of gases that would otherwise pose a threat to the refinery, it nonetheless does not authorize any emissions that result from such flaring. In other words with the exception of emissions resulting from operation of the flare pilots (which by definition have to be lit at all times), any and all flare emissions are considered to be excess emissions. DAQ believes such excess emissions, should they occur, are adequately addressed by DAQ's enforcement program. Furthermore, DCRC's flaring and blowdown system is equipped with a flare gas recovery system and the draft permit requires at least 1 flare gas recovery compressor to be operational at all times. The draft permit also requires weekly sampling of the flare header followed by chromatographic analysis. Therefore, DAQ does not see the necessity to specify the additional requirements suggested by the EIP.</p> |

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| 15-SC             | <p>It is the purpose of the Clean Air Act is "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population" (42 USC § 7401). The Title V permit is a requirement under the Clean Air Act for facilities that emit hazardous air pollutants (42 USC §7412). That we are here for a Title V permit is an acknowledgement, by definition, that the Delaware City Refinery is a source of hazardous air pollutants that place public health and welfare at such risk that they must be permitted.</p> <p>Delaware is in nonattainment status with the Clean Air Act's Criteria Air Pollutants for ozone and fine particulates: The following table is drawn from the EPA's "Currently Designated Nonattainment Areas for All Criteria Pollutants":</p> <p><i>[DAQ comment – this table has been omitted for brevity]</i></p> <p>The improvement in air quality should be prioritized in the development of long-term permits for the Delaware City Refinery. While ozone and fine particulates are in nonattainment, the air quality monitoring station near the Delaware City Refinery, as described in the "Delaware Annual Air Quality Report 2011" (p. 9), only samples for sulfur dioxide, carbon monoxide and wind speed/direction. The air quality monitoring program is inadequate in Delaware to protect public health from the risks of Criteria Air Pollutants, and of emissions from the Delaware City Refinery.</p> | <p>DAQ disagrees. While DAQ is cognizant of the numerous comments made with regard to fence line monitoring around the DE City refinery, it is pertinent to evaluate this comment in the context of the State's existing monitoring infrastructure. The U.S. EPA has developed siting requirements for each of the "criteria" air pollutants. Delaware has had air monitoring sites located around the state since the late 1960s. The original focus of the monitoring network was on monitoring close to "point" sources (large facilities with high emissions). DNREC has an air monitoring station on Rt. 9 adjacent to the baseball field at the Delaware City ballpark that presently monitors CO, SO<sub>2</sub>, VOCs (including some carcinogens) and PM<sub>2.5</sub> pollutant levels for Delaware City. The location of this monitoring station is in accordance with federal requirements and guidelines and is providing quality assured data. Federal guidance include considerations such as the purpose of the monitoring (representative ambient concentrations, maximum source impact, etc.), the pollutant or pollutants to be monitored, the population density, location of other monitoring stations (including those in other states) and operational efficiency. Federal siting requirements include distance from trees, buildings and roadways, distance from major point sources, and height of the sampler probe or inlet. Other factors include site security and access, availability of electricity and telephone service, aesthetics and local zoning issues, and long-term (+10 years) site availability. Furthermore, because the emissions from the refinery's major emission sources occur from tall stacks (over 200 feet), a receptor located at the facility's fence line will most likely not represent maximum concentration or a measure of exposure. Finally, the primary requirement of the TV permitting program is to provide all applicable requirements in a single operation permit. Fence line monitoring around the perimeter of the DE City Refinery is not an applicable requirement as defined by 7 DE Admin. Code 1130. For all of the above reasons, DAQ disagrees that fence line monitoring be included as a permit condition in this Title V permit renewal. Every applicable requirement in the permit has an associated compliance methodology and monitoring/record keeping requirement. The permit relies on measuring compliance at the emission unit by periodic or continuous direct or surrogate monitoring rather</p> |

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|                          |   | than assess compliance by fence line monitoring.  |
| 16-SC                    | <p>Given that the capacity of the refinery will stay the same, at 191,000 barrels per day, we have asked DNREC in our public hearing request on February 18, 2013 to explain why the permit application proposes these dramatic increases in pollution in the fluid coking unit:</p> <ul style="list-style-type: none"><li>• Increase in Total Suspended Particulates by 29% (Page 186).</li><li>• Increase in Sulfur Dioxide emissions by 4.7% (Page 190).</li><li>• Increase in Carbon Monoxide emissions by 14.2% (Page 192).</li><li>• Increase in Volatile Organic Compound emissions by 12.3% (Page 192).</li><li>• Increase in Sulfuric Acid emissions by 17.2% (Page 194).</li><li>• Increase in Ammonia emissions by 15.9% (Page 194).</li><li>• Increase in Lead emissions by 33.3% (Page 195).</li></ul> <p>We have not received any response to our request for this information to date.</p> <p><b><i>We ask for a response to this request in writing within the next <u>14 days</u>, and that the public comment period for the Title V permit be extended <u>30 days</u> to enable us to respond to this information.</i></b></p> | DAQ addressed this misunderstanding in response to comment #1-SC at the beginning of this table and disagrees that the Title V permit renewal is authorizing increases. |
| 17-SC                    | <p>It is the responsibility of government to include public comments in the deliberation over pollution limits. DNREC acted inappropriately in pressuring the person who</p>  | The Department received no request for a public hearing on DCRC's application for a Significant Permit Modification in 2011.  |

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|                   | <p>submitted the public hearing request for the Significant Permit Modification in 2011 into withdrawing that hearing request because of the delays that a hearing would cause to the refinery. A public hearing for the Title V Significant Permit Modification for the restart of the refinery was not held, and public concerns about increases in air pollution due to the restart of the refinery equipment, and the resumption of refinery processes, were intentionally restricted from being entered into the public record.</p> <p><b><i>We ask the DNREC Secretary to issue a Secretary's Order to the Department specifically instructing staff that asking members of the public to withdraw permit hearing requests is an inappropriate exercise of their authority, and that this type of behavior is not allowed by government.</i></b></p> |  |
| 18-SC             | <p>Several projects have been approved at the Refinery since this permit application was submitted on May 22, 2012. These include the following:</p> <p><u>October 2, 2012: APC-2013/0030 Crude Oil Railcar Unloading Project Permit</u>, 10 pounds per day of VOCs. There was no public notice of this permit, no public comment was collected, and no public hearing held, which prevented DNREC from incorporating public concerns about air quality into the permit conditions.</p> <p><u>March 7, 2013: Secretary's Order No. 2013-A-0008 Olefins Unit</u>. Restart of the olefins unit will increase projected air emissions from the refinery fuel gas fired olefins heater, product storage tanks, product loading rack emissions, and fugitive emissions. Emissions from</p>  | <p>DAQ disagrees that the Title V permit as presented is an out-of-date document that does not reflect expansions and equipment restarts at the refinery. The Title V permitting program is designed to accommodate changes that occur within facilities and the permitting mechanism specifically allows a facility to make significant permit modifications to the permit to reflect these authorized changes. So, DAQ acknowledges receipt of applications for several projects at the Refinery since this permit application was submitted on May 22, 2012. As a matter of fact, in addition to the applications mentioned by the Sierra Club, the Department has received applications for additional railcar unloading registrations as well as permit applications for the modification of the WWTP VCU Fuel Change Project, the MVR Vapor Combustor Amendment Project and for the Boilers 3 and 4 Steam Injection Project. Indeed, for a complex facility like DCRC's DE City Refinery, DAQ fully anticipates that there will always be ongoing changes that will invariably trigger permitting requirements thereby making the Title V permit for this facility a dynamic permit instrument. As a result, when changes occur, the facility has an obligation to make an</p> |

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|                   | <p>these sources are estimated to total 9.2 TPY of nitrogen oxides, 3.7 TPY of sulfur dioxide, 1.2 TPY of carbon monoxide, 5.4 TPY of volatile organic compounds, 0.8 TPY of particulates, 0.8 TPY of fine particulates, 0.1 TPY of sulfuric acid, 0.0001 TPY of lead and 18,716 TPY of carbon dioxide equivalent. The public hearing for this permit application was not adequately noticed. Delaware Sierra Club, who requested this hearing, was not notified that the hearing had been scheduled until hours before the hearing. The hearing officer extended the public comment deadline by only 7 days (we requested 14 days, to which the refinery complained), but DNREC did not issue a public notice that the public comment period had been extended, or how to submit written comments. Instead, the hearing officer stated that the Delaware Sierra Club should provide this service.</p> <p><u>April 22, 2013: Secretary's Order No. 2013-A-0011 Ether Cooling Tower</u>, this closed loop cooling tower has been out of service since early 2002, and estimates that the following air pollutants will increase: Volatile Organic Compounds will increase by 5.5 tons per year; Particulate Matter (PM10) will increase by 1.7 tons per year, and Fine Particulate Matter (PM2.5) will increase by 1.7 tons per year.</p> <p><i>The Title V permit as presented is an out-of-date document that does not reflect expansions and equipment restarts at the refinery. Though we understand the temporal nature of the Title V permit process, we ask for a complete, up to date</i></p> | <p>application to update and amend their Title V permit within 12 months of making the change. Indeed, because of DAQ's cognizance of the complexities inherent in a facility like the DCR and in the Title V permitting mechanism itself, DAQ held an informal workshop on March 25, 2013 where these details were explained in detail. Therefore, DAQ considers the draft Title V permit to be an up-to-date permit.</p> |

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|                   | <i>accounting of air emissions at the Delaware City Refinery in writing within the next 14 days, and that the public comment period for the Title V permit be extended 30 days to enable us to respond to this information.</i>  |   |
| 19-SC             | <p>On April 7, 2013 the Division of Air Quality issued a public hearing notice for the Title V permit hearing, which was scheduled to take place on April 30, 2013. This provided 23 days of notice for a public hearing, yet DNREC is required by federal law (Title 40 CFR §70.7) to provide 30-days public notice.</p> <p>The justification provided for this by Mr. Ravi Rangan (by email on April 4, 2013), engineer in the Division of Air Quality, was that the notice was provided verbally to a group who attended a public workshop held by the Department on March 25, 2013. This explanation ignored the specific requirements for public notice provided in federal law:</p> <p>(1) Notice shall be given: by publication in a newspaper of general circulation in the area where the source is located or in a State publication designed to give general public notice; to persons on a mailing list developed by the permitting authority, including those who request in writing to be on the list; and by other means if necessary to assure adequate notice to the affected public (Title 40 CFR §70.7 (h)).</p> <p>The justification provided for this by Mr. Paul Foster (by email on April 4, 2013), enforcement officer for DNREC, was that the requirement for public notice was 20 days. This</p> | <p>The Department provided more than the mandated 30 day notice requirement for the said hearing. Furthermore, the hearing officer granted an additional 30 day extension to the public comment period during the hearing on June 4, 2013. Therefore, DAQ does not find this comment to be germane to this TV permit renewal application.</p> |



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|                   | <p>explanation failed to account for the specific notice requirements provided in federal law:</p> <p>(4) Timing. The permitting authority shall provide at least 30 days for public comment and shall give notice of any public hearing at least 30 days in advance of the hearing (Title 40 CFR §70.7 (h)).</p> <p>It was only after the intervention of elected officials that DNREC finally committed to rescheduling this hearing in a manner that was consistent with federal requirements. The public notice of the rescheduling of the hearing was issued on April 28, 2013, just two days before the original hearing date, and only following the Sierra Club's specific request that the rescheduled hearing be announced (by email on April 24, 2013).</p> <p>On May 28, 2013 the State of Delaware public calendar was changed and listed both the original location (Delaware City Community Center) and a new location (Gunning Bedford Middle School), creating a considerable amount of confusion about the location of the hearing and the possibility of two hearings taking place at the same time. After notifying DNREC as to two locations, the public calendar was updated to reflect Gunning Bedford Middle School. Although we had made the original public hearing request for this permit, we were not notified that the location had changed.</p> <p>On May 29, 2013 we received an email from Ms. Penny Gentry of DNREC notifying me that the location had changed again, to the Delaware City Fire Hall. The public notice for this change in location was not issued until May</p> |                                |

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|                   | <p>30, 2013, 5 days before the hearing.</p> <p>As this course of events and sharing of misinformation conveys, DNREC was unfamiliar with the public notice requirements for Title V permits and attempted to conduct a hearing without the 30-days required public notice. A considerable amount of confusion has also resulted by the delays in issuing notices to the public about the hearing and the changes in location.</p> <p>In its authority to issue Title V permits, DNREC has the responsibility to know, understand and follow the law. DNREC also has the added responsibility of acting in a manner consistent with its values, "integrity, respect, customer focus, openness and quality". In both regards, this was not the case. If DNREC is unable to, or unwilling to, follow simple federal requirements for the public hearing process, we question the other aspects of the permit as well.</p> <p><b><i>We ask DNREC to extend the public comment period by 30 days to assure the public that its comments will be included in the hearing officer's report.</i></b></p> |  |
| 20-SC             | <p>Condition 2 – General Requirements, part D – Construction, Installation or Alteration, found on page 13 of the Draft Permit, describes:</p> <p>The Owner/Operator shall not initiate construction, installation, or alteration of any equipment or facility or air containment control device which will emit or prevent the emission of an air contaminant prior to submitting an application to the Department under</p>  | <p>DAQ disagrees with this comment. The three items mentioned are not permits, but are registrations issued in accordance with the requirements of 7 DE Admin. Code 1102 Section 9. Registrations apply to sources that emit between 0.2 and 10 pounds of pollutants per day and are not required to be advertised for public comment prior to issuance.</p> |

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|                   | <p>Regulation No. 1102, and, when applicable, Regulation No. 1125, and receiving approval of such application from the department; except as exempted in the state of Delaware Regulation No. 1102 Section 2.2.</p> <p>Chapter 60 Delaware Code §6004 describes the permit application and hearing process, which includes the requirement of the Department to issue a public notice that includes:</p> <ul style="list-style-type: none"><li>(1) The fact that the application has been received;</li><li>(2) A brief description of the nature of the application; and</li><li>(3) The place at which a copy of the application may be inspected.</li></ul> <p>The Secretary shall hold a public hearing on an application, if he or she receives a meritorious request for a hearing within a reasonable time as stated in the advertisement.</p> <p>For the facilitation of information on public notices, DNREC maintains a public notice email distribution list where all public notices are distributed, and these notices are also posted on DNREC's public notices website.</p> <p>Since the refinery restart, the State of Delaware has issued several air pollution permits to the Delaware City Refinery without following this procedure:</p> <ul style="list-style-type: none"><li>• August 3, 2011: APC-2012/0003 Two New LPG Loading Slots at the LPG Railcar Loading Facility</li><li>• August 4, 2011: APC-2012/0110 Crude Oil Railcar</li></ul> |                                |

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|                   | <p>Unloading Project, 30 railcars unloaded per day</p> <ul style="list-style-type: none"><li>• October 2, 2012: APC-2013/0030 Crude Oil Railcar Unloading Project, one unit train per day with 100 railcars at a 25 position rack</li></ul> <p>That these permits were issued by DNREC without public notice or the ability for public comment prevented DNREC from considering the impact of public health and the environment, for which its mission is to protect, within the permit. Public concerns about the rail unloading facility were aired at a public meeting at Wilbur Elementary School on February 27, 2013. These concerns included:</p> <ul style="list-style-type: none"><li>• The impact of diesel emissions from train engines on air quality.</li><li>• The impact of road crossings on traffic, emergency response and reduced air quality from idling vehicles.</li><li>• The impact of noise pollution on nearby residents.</li><li>• Offgassing of hazardous air pollutants from rail cars in transit, at the refinery, and at the holding yard at the former Chrysler plant in Newark.</li><li>• Potential for train accidents, which would spill hazardous pollutants into residential neighborhoods.</li><li>• Road congestion from the train crossings.</li></ul> <p>The public has been denied its rights to public comment and public hearing in the construction of the train offloading racks.</p> <p><b><i>Condition 2 – General Requirements, part D – Construction, Installation or Alteration of the Draft Title</i></b></p> |                                |

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|                   | <i>V Permit (p. 13) requires that the installation of any equipment at the refinery that shall emit any air contaminant have a permit issued prior to construction. In the case of the above-referenced air permits, DNREC did not follow its own procedures in issuing permits. We therefore ask DNREC that all permits for the Delaware City Refinery that have not been publicly noticed to be re-noticed and a public comment period be provided. We ask for a response to this request in writing within the next 14 days, and that the public comment period for the Title V permit be extended 30 days to enable us to respond to this information.</i>   |   |
| 21-SC             | <p>Since the refinery restart, the State of Delaware has issued two air pollution permits to the Delaware City Refinery for crude oil railcar unloading, totaling 130 railcars per day:</p> <ul style="list-style-type: none"><li>• August 4, 2011: APC-2012/0110 Crude Oil Railcar Unloading Project, 30 railcars unloaded per day</li><li>• October 2, 2012: APC-2013/0030 Crude Oil Railcar Unloading Project, one unit train per day with 100 railcars at a 25 position rack</li></ul> <p>According to the December 9, 2010 "Transfer of Department of Natural Resources and Environmental Control Authorizations and Environmental Permits from Premcor to the Delaware City Refining Company" (Appendix C), there are no other air permits that have been issued to the refinery for rail unloading.</p> <p>Yet, at the Community Open House for the New Rail Operations at Wilbur Elementary School on February 27, 2013, Delaware City Refining Company manager Herman</p> | See DAQ's response to comment #20-SC above. |

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|                   | <p>Seedorf publicly announced that the refinery was currently unloading 200 rail cars per day, and that this would increase to 250 train cars per day. This is well above the air permits for 130 train cars per day.</p> <p><b><i>We therefore ask DNREC to audit the amount of train cars unloaded at the refinery for both tar sands bitumen and other crudes, and to compare this to the quantities in the Refinery's existing permits and the Title V permit. We ask that this information be provided in writing within the next 14 days, and that the public comment period be extended 30 days to enable us to respond to this information.</i></b></p>   |  |
| 22-SC             | <p>The air emissions from 200-250 rail cars per day, from the diesel exhaust from train engines, and offgassing or evaporation from the tank cars, is a health concern that has not been addressed.</p> <p>On June 12, 2012 the World Health Organization's International Agency for Research on Cancer issued a press release that announced that it had "classified diesel engine exhaust as carcinogenic to humans (Group 1), based on sufficient evidence that exposure is associated with an increased risk for lung cancer."</p> <p>The U.S. Centers for Disease Control and Prevention's National Program of Cancer Registries ranks Delaware as No. 10 in the nation for lung and bronchus cancers among males and females (2005-2009), with an age-adjusted cancer rate of 78.1 per 100,000 people. The increase in pollution from the Delaware City Refinery's crude-by-rail project places already at-risk communities along the train</p> | <p>The Title V permit is a document that spells out all the conditions and requirements that the refinery must comply with as they pertain <i>to the applicable air quality regulations</i>. Mobile sources are not applicable requirements under the TV program. Therefore, DAQ does not find this comment to be germane to this TV permit renewal application.</p> |

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|                   | <p>route, near the loop-track at the Refinery, and at the Norfolk Southern rail car holding yard next to the former Chrysler plant in Newark, in additional harm from diesel exhaust and possible offgassing from the rail cars. It also places the State of Delaware's conformity for transportation funds in jeopardy.</p> <p><b><i>We ask for accountability in the Title V permit for the mobile emissions of the train cars (diesel train engines, off-gassing) through our communities. Train emissions should be tabulated and included in the final Title V Permit. We ask DNREC for an assessment for the refinery's crude-by-rail diesel emissions in the State of Delaware, as well as a calculation of offgassing from the train cars (that considers future aging of new cars and the potential failure of seals). We ask that this information be provided in writing within the next 14 days, and that the public comment period be extended 30 days to enable us to respond to this information.</i></b></p> |   |
| 23-SC             | <p>Title 7 Chapter 70 of the Delaware Code, the Coastal Zone Act, affords the Secretary of the Department of Natural Resources and Environmental Control with the responsibility of issuing permits within the coastal zone. The footprint of non-conforming use of the Delaware City Refinery appears on the map below of Star Enterprise. Title 7 DNREC Regulations §4.4 describes that the "expansion of any non-conforming uses beyond their footprint(s)" is prohibited. DNREC has allowed for the construction of a double-loop track outside of the footprint of non-conforming use. This occurred without any permit application or decision by the Secretary, and the possible creation of a new business</p>   | <p>The Coastal Zone Act and how it applies to the supply of crude oil to the Delaware City Refinery is not germane to the renewal of the facility's Title V permit for existing stationary sources within the refinery.</p> |

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|                   | <p>entity, a "master limited partnership" that is not provided with grandfathering in the Coastal Zone Act.</p> <p><i>Condition 2 – General Requirements, part D – Construction, Installation or Alteration of the Draft Title V Permit (p. 13) requires that the installation of any equipment at the refinery that shall emit any air contaminant have a permit issued prior to construction. For the infrastructure needed for the unloading of crude oil by rail, which should have gone through a Coastal Zone Act review process, this was not the case. We therefore ask that all activities that are outside of the footprint for non-conforming use be discontinued immediately. We ask that written confirmation of the non-compliance with the Coastal Zone Act be provided within the next <u>14 days</u>, and that the public comment period be extended <u>30 days</u> to enable us to respond to this information.</i></p> |  |
| 24-SC             | <p>Our concern over the increase of rail cars within the coastal zone has been amplified by the recent news that there was a derailment at the loop track on Saturday, May 25, 2013, which was confirmed by DNREC. Information provided to the Delaware Sierra Club states:</p> <p>"Some time on Saturday the 25Th of May 14 rail cars full of crude oil derailed and overturned on the refinery property at the new steaming station on the tracks behind the oil storage tanks closest to Buttermilk Falls. . . Not only did the cars derail, they turned over and came off the trucks that carry the wheels on the cars. Two cranes from Pennsylvania and Maryland were</p>  | <p>See DAQ's response to comment #20-SC above.</p> |



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|                   | <p>brought in to put the cars back on the trucks.”</p> <p>Because no public notice was issued for the rail unloading permits, the public did not have the opportunity to question DNREC about safety and spill-prevention measures at the loop track. Measures should have been installed at this site to prevent spills from contaminating soil, ground- and surface-water so that the public is not required to pay the cleanup costs of environmental contamination in the future. <b><i>We ask that the Environmental Impact Statement for this project be made available in writing in the next 14 days and that the public comment period be extended 30 days to enable us to respond to this information.</i></b></p> <p><b><i>We also ask that all a process be put into place in which all train derailments and accidents associated with the rail loop track and rail unloading facilities at the refinery be reported to the State of Delaware immediately, and that these notices be distributed as part of the Delaware Environmental Release Notification System.</i></b></p> |   |
| 25-SC             | <p>Page 21 of the draft Title V permit explains the emissions events that must be reported:</p> <p>B. Emissions in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department immediately upon discovery and after activating the appropriate site emergency plan in the following manner:</p> <p>1. Emissions that pose an imminent and</p>  | <p>DAQ disagrees. The permit provides emission limitations for all point sources within the Delaware City Refinery. The purpose of this condition is to clearly state the sources reporting obligations. As is evident, the permit establishes a requirement for a source to report immediately upon discovery and after activating the appropriate site emergency plan all emissions that pose an imminent and substantial danger to public health, safety or the environment must be reported by calling the Department's Environmental Emergency Notification and Complaint number (800) 662-8802. However, when excess emissions occur (i.e., emissions in excess of any permit condition or emissions which create a condition of air pollution) but which do not pose an imminent</p> |

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|                   | <p>substantial danger to public health, safety or the environment must be reported by calling the Department's Environmental Emergency Notification and Complaint number (800) 662-8802.</p> <p>2. Emissions in excess of any permit condition or emissions which create a condition of air pollution but do not pose an imminent and substantial danger to public health, safety or the environment must either be called in to the Environmental Emergency Notification and Complaint number (800) 662-8802 or faxed to (302) 739-2466 . . .</p> <p>The permit does not describe the thresholds for each pollutant that must be exceeded in order to meet the definitions of "create a condition of air pollution" or "pose an imminent and substantial danger to public health, safety or the environment."</p> <p>While Title 7 DNREC regulations 1203 Reporting of a Discharge of a Pollutant or Air Contaminant describes reporting thresholds for a list of air pollutants, this list is not specific to meet the requirements of the draft Title V permit, to "create a condition of air pollution" or "pose an imminent and substantial danger to public health, safety or the environment."</p> <p><b><i>We ask that a detailed table of the pollution thresholds for "create a condition of air pollution" and "pose an imminent and substantial danger to public health, safety or the environment" be included</i></b></p> | <p>and substantial danger to public health, safety or the environment the facility must either call the Environmental Emergency Notification and Complaint number (800) 662-8802 or fax the notification to (302) 739-2466. 7 DE Admin. Code 1101 defines "Air Pollution" to mean the presence in the outdoor atmosphere of one or more air contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life or to property or which unreasonably interferes with the enjoyment of life and property within the jurisdiction of the State, excluding all aspects of employer-employee relationships as to health and safety hazards. Thus any permit exceedance is construed to create a condition of air pollution rendering moot Sierra Club's suggestion to describe threshold levels for each pollutant that must be exceeded in order to create a condition of air pollution.</p> |

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|                   | <i>in the permit, and that this table be made available for public comment prior to the finalization of the permit. We ask that this table be provided within the next <u>14 days</u>, and that the public comment period for the Title V permit be extended <u>30 days</u> to enable us to respond to this information.</i>  |  |
| 26-SC             | <p>Page 21 of the draft Title V permit describes:</p> <p>iii. Prior to making a change as provided in Condition 4 [Operational Flexibility] of this permit the Owner and/or Operator shall give written notice to the Department and EPA at least seven calendar days before the change is to be made.</p> <p><b><i>This section does not include any requirements for public notice of changes made to the facility. We ask that public notice requirements be included in the permit for all changes made to the facility. We ask for written confirmation within the next <u>14 days</u>, and that the public comment period be extended <u>30 days</u> to enable us to respond to this information.</i></b></p> | <p>DAQ disagrees. The applicable requirements of 7 DE Admin. Code 1130 do not contain any public notice requirements when companies make changes provided for in the Operational Flexibility conditions. Each permit issued under 7 DE Admin. Code 1130 shall provide that a permitted facility is expressly authorized to make a section 502(b)(10) (of the Act) change within the facility without a permit revision, if the change is not a modification under any provision of Title I of the Act or the State Implementation Plan (SIP), does not involve a change in compliance schedule dates, and the change does not result in a level of emissions exceeding the emissions allowable under the permit, whether expressed therein as a rate of emissions or in terms of total emissions. However, before making a change under this provision, the permittee shall provide advance written notice to the Department and to EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected, including any new applicable requirements. The permittee shall thereafter maintain a copy of the notice with the permit. The written notice shall be provided to EPA and the Department at least seven calendar days before the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven calendar days' notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to EPA and the Department as soon as possible after learning of the need to make the change, together with the reason or reasons why advance notice could not be given. Therefore, DAQ does not find this comment to be germane to this TV permit renewal application.</p> |

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| 27-SC                    | <p>Page 22 of the draft Title V permit describes:</p> <p>iv. The Owner and/or Operator shall submit to the Department an annual emissions statement in accordance with 7 DE Admin Code 117 Section 7.0 . . .</p> <p><b><i>This section does not include any requirements for public notice of annual emissions statements for the facility. We ask that public notice requirements be included in the permit for all emissions statements. We ask for written confirmation of the inclusion of this in the Title V permit within the next 14 days, and that the public comment period be extended 30 days to enable us to respond to this information.</i></b></p>  | <p>DAQ disagrees. All annual emissions statements submitted by the facility pursuant to 7 DE Admin. Code 1117 are documents that are available for public review. Therefore, DAQ does not find this comment to be germane to this TV permit renewal application.</p>  |
| 28-SC                    | <p><u>Flaring Minimization Plan</u></p> <p>According to email correspondence dated April 25, 2013 from Mr. Ali Mirzakhilili of DNREC Air Quality Management Section to the Delaware Sierra Club, the Delaware City Refinery does not have a plan to minimize flaring at the facility. He stated that New Source Performance Standards subpart Ja will require flaring management plans in 2015. In reading those regulations in the Federal Register, we are concerned that this may not apply to flaring systems at the Delaware City Refinery, which are not new and may not experience the minimum threshold of repairs for this new regulation to go into effect.</p> <p>Of the numerous flaring events in recent months at the refinery, a leading cause is power failure. The most famous of these recent events was caused by a raccoon that got</p> | <p>DAQ disagrees. The refinery's flare gas recovery system operates at all times and is designed to recover all off-gasses from the refinery's various process units. In emergency and atypical situations, the flares are designed to combust those gases to minimize pollutants released to the environment. VOC emissions from a flaring event are minimized because flares have a VOC destruction efficiency of 98%. It is noteworthy that there has been a marked decrease over the past year of instances when the refinery has flared. However, DAQ will ensure that refinery's flaring management plan, when it becomes applicable, will addresses all applicable requirements of the New Source Performance Standards. Additionally, as mentioned in DAQ's response to the EIP's comment on flaring, DAQ's approach to ensuring minimization of flaring practices is amongst the most stringent in the nation. This is because DAQ's draft permit, while it allows operation of the flare to safely combust and dispose of gases that would otherwise pose a threat to the refinery, it nonetheless does not authorize any emissions that result from such flaring. In other words with the exception of emissions resulting from operation of the flare pilots (which by definition have to be lit at all times), any and all flare</p> |

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|                   | <p>into high-voltage switch gear on November 27, 2011, contributing to an electrical shut down that caused the release of 1000 pounds of carbon monoxide, 10 pounds of hydrogen cyanide, 100 pounds of hydrogen sulfide, and 500 pounds of sulfur dioxide. Other power failures have resulted in flaring and the release of hazardous air toxins which seem to occur on a regular basis.</p> <p>Volatile Organic Compounds (VOCs) and Sulfur Dioxide (SO<sub>2</sub>) released during flaring events can have numerous acute and long-term health implications, including asthma attacks, eye, skin and nose irritation, as well as the deleterious effects of high-stress "shelter in place" procedures required during extreme flaring incidents.</p> <p><b>We ask that a Flare Minimization Plan be developed and implemented within one year as a requirement for this Title V permit. The plan should include:</b></p> <ul style="list-style-type: none"><li>a) anti-surge control systems on coker units wet gas compressors;</li><li>b) flare monitoring equipment, including a description of the manufacturer's specifications of flow metering devices, including the make, model, type, range, precision, accuracy, calibration, maintenance and quality assurance procedures;</li><li>c) flaring reduction hardware;</li><li>d) flare gas recovery system(s);</li><li>e) tank emissions equipment;</li><li>f) sulfur recovery unit(s); and</li></ul> | <p>emissions are considered to be excess emissions. DAQ believes such excess emissions, should they occur, are adequately addressed by DAQ's enforcement program. Furthermore, DCRC's flaring and blowdown system is equipped with a flare gas recovery system and the draft permit requires at least 1 flare gas recovery compressor to be operational at all times. The draft permit also requires weekly sampling of the flare header followed by chromatographic analysis. Therefore, DAQ does not see the necessity to specify the additional requirements suggested by the Sierra Club.</p> |

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|                   | <p>g) backup power generation capacity to prevent flaring in the case of power failure.</p> <p>The Flare Minimization Plan should include public input to assure the public that its concerns are being addressed in the plan.</p> <p>We ask DNREC to provide us with written confirmation of the timeline for implementation of a Flare Minimization within the next <u>14 days</u>, and that the public comment period for the Title V permit be extended <u>30 days</u> to enable us to respond to this information.</p>   |  |
| 29-SC             | <p>The Delaware City Refinery has had numerous permit violations, the most recent of which was 2013-11779, enforcement action served on May 30, 2013 for an unpermitted release of 527,000 pounds of sulfur dioxide in January 2013 from the Fluid Coking Unit (FCU) Carbon Monoxide Boiler (COB).</p> <p>The Delaware Environmental Release Notification System (DERNS) notice for this emissions event, issued on January 16, 2013, indicated that 3000 pounds per hour will be released daily during repairs to the boiler.</p> <p>DNREC has not established a fee schedule for the costs that violating permits should accrue for pollution. DNREC's lack of a penalty schedule was confirmed by email from Mr. Ali Mirzakhaili on April 25, 2013.</p> <p><i>We ask that DNREC develop a fee schedule for permit violations for this facility, which we ask to be</i></p> | DAQ disagrees. See DAQ's response to comments #3-SC and #4-SC. |

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|                   | <i>included in the Title V permit. The fee schedule should include a multiplying factor for chronic violator status. We ask that this fee schedule be provided in writing within the next <u>14 days</u>, and that the public comment period for the Title V permit be extended <u>30 days</u> to enable us to respond to this information.</i>  |  |
| 30-SC             | <p>DNREC has existing regulations for chronic violator status that were established in 2004. In 2011, SB 92 w/ HA 1 revised Title 7 Chapter 79 of the Delaware Code for DNREC's chronic violator program and clarified definitions, standards and criteria, and updated DNREC's authority. DNREC has not yet revised its chronic violator regulations or initiated the regulatory rule-making process to bring them up to date with the recent revisions to the Delaware Code.</p> <p>"The purpose of chronic violator status is to provide a mechanism for preventing or correcting circumstances in which: (1) One or more of the traditional enforcement tools and regulatory programs of the Department appear insufficient to conform behavior and deter future violations by the regulated party; or (2) The regulated party appears to be treating penalties and other sanctions as merely an on-going business expense rather than as symptomatic of underlying problems and threats to the State's environment that must be addressed and corrected" (Title 7 Delaware Code § 7901c).</p> <p>On August 6, 2012 we requested that DNREC establish chronic violator regulations and designate the Delaware City Refinery as a chronic violator. In a reply dated August 23, 2012, Mr. Ali Mirzakhaili advised that the public comment</p> | DAQ Disagrees. See DAQ's response to comment #4-SC |

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|                   | <p>period for Executive Order 36 would be an opportunity to review this issue. Our public comment at the Executive Order 36 hearing on January 22, 2013 and our written comments dated February 26, 2013 reiterated our request.</p> <p><b>As a condition of this Title V permit, we ask DNREC to immediately begin to develop the needed regulatory updates to its chronic violator regulations, and to complete this process in 2013. We ask DNREC to include the following in the review of chronic violator regulations:</b></p> <ul style="list-style-type: none"><li>a) <b>Prioritize the establishment of regulations for the designation of chronic violator status and initiate rule-making proceedings within the next six months.</b></li><li>b) <b>Consider the environmental justice impacts of the pollution caused by permit violations when making decisions about penalties.</b></li><li>c) <b>Utilize the chronic violator regulations as a mechanism to decrease the ability of industries to pollute as the cost of doing business by increasing penalties for designated industries.</b></li><li>d) <b>Include a mechanism for citizens to petition to initiate proceedings for the designation of chronic violator status.</b></li><li>e) <b>Require that proceedings for designation of chronic violator status be conducted in a timely manner, with specific deadlines as part of the regulations.</b></li><li>f) <b>Enhance the transparency of the regulatory</b></li></ul> |                                |



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|                   | <p>process by providing all permits, permit applications, and documents pertaining to permit violations on the DNREC website.</p> <p><i>We ask for a timeline for the development of chronic violator regulations provided in writing within the next <u>14 days</u>, and that the public comment period be extended <u>30 days</u> to enable us to respond to this information.</i></p>   |  |
| 31-SC             | <p>Air quality monitoring has been a long-standing point of concern at the refinery, and the Delaware Sierra Club and our environmental justice partner the Delaware City Environmental Coalition have asked for real-time air monitoring at the fenceline of the refinery and in residential neighborhoods on numerous occasions since the refinery was purchased by PBF in June 2010.</p> <p>While owned by Premcor, the refinery operated ambient air monitoring stations for total suspended particulates. In the May 31, 2010 "Agreement Governing the Acquisition and Operation of Delaware City Refinery" Secretary O'Mara authorized the refinery to discontinue use of ambient air quality monitors (p. 18).</p> <p>Using penalty funds for permit violations paid by the Delaware City Refinery, the Delaware City Environmental Coalition, under the oversight of DNREC's Community Involvement Advisory Council, contracted with an independent local environmental consulting firm for air quality monitoring for a pilot project that compared air quality in residential neighborhoods before and after the refinery restart. This air monitoring pilot project demonstrated the need for continuous air monitoring in at</p> | DAQ disagrees. See DAQ's response to comment #15-SC. |

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|                   | <p>the fenceline of the refinery and in residential neighborhoods to insure compliance with permit conditions and to protect public health.</p> <p>We have recently learned that the Delaware City Refinery contracted with Environmental Resources Management (ERM) to repeat this study in March of 2013. The announcement (Appendix D) that the Refinery has circulated to neighbors about this project states that they selected ERM:</p> <p>“because they are a well-respected, professional firm with worldwide environmental engineering experience.”</p> <p>To the contrary, the U.S. State Department's Office of Inspector General has launched a conflicts-of-interest investigation into ERM for its role in the environmental impact assessment of the TransCanada Keystone XL pipeline. The relationship between the Delaware City Refinery, which is now refining Canadian tar sands, and this company calls the refinery's air monitoring study into question.</p> <p>Further, the Refinery claims that:</p> <p>“To conduct this study, they [ERM] used the highest technical standards, which were reviewed in advance by DNREC.”</p> <p>However, in the March 25, 2013 workshop held by DNREC for the Delaware City Refinery's Title V Permit, Mr. Ali</p> |                                |

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|                   | <p>Mirzakhali, division director of Air Quality, explained to the contrary that DNREC has had nothing to do with this study.</p> <p>The need for DNREC's leadership in protecting public health and the environment through the design and oversight of a scientifically rigorous continuous air monitoring study is long overdue. Currently, residents in surrounding communities have no way of accurately gauging the real-time status of air quality in their neighborhoods. This is especially important during upsets at the refinery, when air quality can dramatically change. Particularly, given the requested pollution levels in this permit, publically-accessible real-time air quality monitoring is needed to allow our community to understand air quality threats to health and safety in a timely manner.</p> <p>Communities need strong, real-time monitoring provisions to protect their health and safety, including by providing real-time information into an alert system used to warn people when there is a malfunction or emergency, a major problem with refineries.</p> <p><b><i>We ask that the installation of a continuous real-time emission monitoring program at the fence-line of the refinery and in residential neighborhoods be a condition of this Title V permit. This program should be developed in collaboration with the public to insure that the needs of public health are being achieved. We ask that a timeline for the development of a real-time monitoring program be provided in writing within the next <u>14 days</u>, and that the public comment period be extended <u>30 days</u> to</i></b></p> |                                |

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|                   | <i>enable us to respond to this information.</i>   |  |
| 32-SC             | <p>The Delaware City Refinery has had major pollution events in the past, for which no safety plan has gone into effect that alerts nearby residents of the measures that must be taken to protect their health and families.</p> <p>Refineries in the United States have had catastrophic explosions and air pollution incidents, which should be learning experiences for the Delaware City Refinery:</p> <ul style="list-style-type: none"><li>• August 2012 Chevron Oil Refinery in Richmond California: crude distillation unit caught fire. Residents were advised to shelter in place and 11,000 people were treated in hospitals.</li><li>• April 2013 Marathon Refinery in Detroit Michigan: a tank containing diesel fuel exploded during routine maintenance. Some residential communities were evacuated, leading to concerns about environmental justice in emergency response plans.</li></ul> <p>We cannot afford to wait for a disaster of this kind, or another catastrophe of the type of the July 17, 2001 sulfuric acid tank explosion that released 1.1 million gallons of sulfuric acid, 99,000 gallons of which reached the Delaware River, killing fish and other aquatic life. One refinery worker was killed and eight others were injured in this explosion.</p> <p>We understand that various agencies have responsibility for emergency response and that some progress has been made in this regard.</p> <p><i>As a condition of this Title V permit, we ask for the</i></p> | <p>DAQ disagrees. While, DAQ notes that the State of Delaware employs a fully trained State Emergency Response Team and local fire departments to aid in situations envisioned within this comment, the Sierra Club's proposed terms and conditions to be included in the Title V permit are not applicable requirements as defined in section 2 of 7 <b>DE Admin. Code</b> 1130. Therefore, DAQ does not find this comment to be germane to this TV permit renewal application.</p> |

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|                   | <i>collaborative development of a robust and easily accessible Emergency Response and Evacuation Plan that community members can reference in case of a major incident. In addition to approval by the public, the plan should also be approved by the EPA prior to this Title V permit renewal. We ask that a process for the development of this plan be provided in writing within the next <u>14 days</u>, and that the public comment period be extended <u>30 days</u> to enable us to respond to this information.</i>   |   |
| 33-SC             | <p>The increases in pollution levels requested in the permit application are of particular concern as the area surrounding the refinery has been identified as a census tract of high cancer risk.</p> <p>According to the Centers for Disease Control and Prevention and the Department of Health and Social Services, the area of surrounding the refinery is a high cancer census tract.</p> <p>Age-Adjusted Cancer Rates per 100,000 people:<br/>United States = 465.1<br/>State of Delaware = 517.0<br/>Delaware City's Census Tract = 680.5</p> <p>The relationship between public health and the hazardous air pollutants emitted from the Delaware City Refinery has not been addressed in this permit application, which instead proposes to increase harmful air pollutants.</p> <p><b><i>We request that the cumulative health impacts of hazardous pollutants from the Delaware City Refinery, in conjunction with the numerous other</i></b></p> | <p>As mentioned above in our response to Comment #1-SC, this permitting action does not itself allow the emissions increase. Any emissions changes were already authorized as part of the permitting steps ending in issuance of the operation permits mentioned above on September 7, 2011. The current permitting action only moves the current limits from the individual operation permits into the facility wide Title V permit.</p> |

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|                          | <b><i>polluting facilities in the area immediately surrounding the refinery, be utilized to set pollution limits in this Title V permit. We ask that pollution limits be revised to reflect the suggested reduction measures, and that confirmation of new limits be provided in writing within the next 14 days, and that the public comment period be extended 30 days to enable us to respond to this information.</i></b>  |   |
| 34-SC                    | <p>The Delaware City Refinery has exercised intimidation tactics against the public and community members concerned about pollution and their health. Security vehicles follow and pull-over our cars on public roads in use long before the construction of the refinery, follow us home, and state police are asked to follow up. Such intimidation presents a deterrent to public engagement over health and safety at the refinery and must come to an end.</p> <p>In April 2013 Department of Natural Resources and Environmental Control Community Ombudsman James Brunswick and Chief of Enforcement, Jim Faedtke, at our request, attempted to schedule a meeting with the refinery to address these concerns. The refinery has claimed Homeland Security Rights-of-Way give them the right to prevent people from looking at the refinery and taking photographs from public roads. The refinery has refused to either provide a map of where these rights of way are located, or to meet with DNREC and the public about areas where the refinery is legally able to approach the public.</p> <p><b><i>As active and concerned members of the community, we request an open and collaborative relationship with the Delaware City Refinery and an end to</i></b></p> | DAQ does not find this comment to be germane to the renewal of this Title V permit. |

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|                   | <i>current intimidation tactics so that we can gain a better understanding of the facility's operations and role in our neighborhood. We request a map of the rights of way of the refinery be provided within the next 14 days, and that the public comment period be extended 30 days to enable us to respond to this information. We request a public meeting to address intimidation within the next 30 days, and that the hearing record for the Title V permit is held open during this event to include the comments and dialogue that occurs at this meeting.</i>  |  |
| 35-SC             | <p>On April 24, 2013 DNREC held a public hearing for Regulations 1108 Sulfur Dioxide Emissions from Fuel Burning Equipment, which revise the State of Delaware's compliance regulations for the National Ambient Air Quality Standards set forth in the Clean Air Act. Section 1.2 of the proposed regulations provides for exemptions to the regulations, which adds fluid catalytic cracking to the list of exempted processes, which also include fluid coking and catalyst regeneration.</p> <p>The existing exemptions for fluid coking and catalyst regeneration, and the proposed exemption for fluid catalytic cracking from SO<sub>2</sub> regulations, provides for an exception for one of the largest sources of SO<sub>2</sub> emissions in Delaware, the Delaware City Refinery. DNREC's November 2012 <i>Delaware Toxics Release Inventory Data Detail</i> found the Delaware City Refinery to be the second-largest polluter in the state, behind the Indian River Power Plant. Since May 27, 2011 the PBF Delaware City Refinery and the DuPont Red Lion Sulfuric Acid Regeneration Plant have been the sole sources of SO<sub>2</sub> Delaware Environmental Release Notification System</p> | DAQ disagrees. 7 DE Admin. Code 1108 was finalized on July 11, 2013, rendering the comment moot. |

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|                          | <p>(DERNS) notices in the state.</p> <p>It is inappropriate to exempt one of Delaware's largest polluters, the Delaware City Refinery, and its dependent regeneration plant, the DuPont Sulfuric Acid Regeneration Plant, from SO<sub>2</sub> regulations which are intended to protect public health.</p> <p>SO<sub>2</sub> is regulated in the NAAQS for important health reasons. The EPA describes these health risks:</p> <p>“Current scientific evidence links short-term exposures to SO<sub>2</sub>, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects including bronchoconstriction and increased asthma symptoms. These effects are particularly important for asthmatics at elevated ventilation rates (e.g., while exercising or playing.)</p> <p>Studies also show a connection between short-term exposure and increased visits to emergency departments and hospital admissions for respiratory illnesses, particularly in at-risk populations including children, the elderly, and asthmatics.”</p> <p>Exempting refinery processes from these SO<sub>2</sub> regulations presents an unnecessary risk to public health, particularly in communities surrounding the Delaware City Refinery. We therefore ask that all exemptions in Section 1.2 be removed from the final regulations, including fluid catalytic cracking, fluid coking and catalyst regeneration.</p> |                                       |



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|                          | <p><i>We ask if DNREC to clarify if it has included exemptions to NAAQS regulations as part of this Title V Permit. We ask that this information be provided in writing within the next <u>14 days</u>, and that the public comment period be extended <u>30 days</u> to enable us to respond to this information.</i></p> <p><i>We ask DNREC to initiate a process immediately that removes all exemptions for the Delaware City Refinery from pollution regulations as a condition of this Title V permit. We ask that a timeline for this process be provided in writing within the next <u>14 days</u>, and that the public comment period be extended <u>30 days</u> to enable us to respond to this information.</i></p>  |   |
| 36-SC                    | <p>EPA has recently proposed a rule to address inadequacies in state implementation plans under the Clean Air Act that exempt emissions from startup, shutdown and maintenance (SSM) of facilities. As noted in Sierra Club's comments to that proposed rule, exemptions of SSM emissions conflict with statutory requirements under the Clean Air Act that all emissions in excess of allowable limits must be considered violations. Exemptions of SSM emissions also interfere with EPA's and citizens' statutory authority to enforce compliance with emissions limits.</p> <p>Title 7 DNREC Regulations 1114 exempt the start-up and shut-down of equipment from visible emissions regulations, and the rules apply only to continuous operations. It is during this period of start-up and shut-down that visible</p> | <p>DAQ concurs. DAQ has taken the lead on eliminating emissions exemptions that occur during periods of startups, shut downs and malfunctions. This permit does not provide any exemptions for emissions that occur during periods of startups, shut down or malfunctions. In other words, the annual mass emission limitations specified in the permit are applicable for emissions that occur during periods of startups, shut downs and malfunctions. Having said that, it should be noted that the refinery's process units are designed to operate in continuous, steady-state operation and may come offline for a turn-around at specified intervals, typically between 36 and 48 months depending on the process unit in question and on the severity of operating conditions. Process units do not start up and shut down numerous times a day. For the large unit operations like the fluid coking unit, the fluid catalytic cracking unit and the sulfur plant, all with complex start up and shut down procedures, this permit has very detailed and prescriptive procedures that apply during such periods. But all mass emissions are included in the respective annual limits and none are given a "free pass"</p> |

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|                   | <p>emissions are often the greatest. Given the numerous times per day that equipment could be starting up or shutting down, which are exempt from air quality regulations, suggests that DNREC does not provide adequate protections for visible emissions.</p> <p><i>We ask DNREC to take the lead on closing these exemptions for refinery start-up and shutdown, starting with the Delaware City Refinery. We ask that a timeline for this process be provided in writing within the next <u>14 days</u>, and that the public comment period be extended <u>30 days</u> to enable us to respond to this information.</i></p>  | <p>during these times.</p>  |
| 37-SC             | <p>On August 31, 2002, the Clean Water Act NPDES permit for the Delaware City Refinery expired, and the amount of aquatic life destroyed by the refinery's once-through cooling system is well documented in the following reports:</p> <ul style="list-style-type: none"><li>• Normandeau Associates 2001: Impingement and Entrainment at the Cooling Water Intake Structure of the Delaware City Refinery, April 1998 - March 2000.</li><li>• ESSA Technologies 2001: Review of Report on Impingement and Entrainment at the Cooling Water Intake Structure of the Delaware City Refinery, April 1998 - March 2000.</li><li>• EPA 2002: Delaware Estuary Watershed Case Study.</li><li>• Kahn 2008: Impacts of Impingement and Entrainment Mortality by the Delaware City Refinery on Fish Stocks and Fisheries in the Delaware River and Bay.</li></ul> | <p>This permitting action pertains to the renewal of the facility's Title V permit which is an air permit issued in accordance with <b>7 DE Admin. Code 1130</b>. The cooling water needs of the Delaware City Refinery and the NPDES permit fall under the purview of the Water Program administered by the Department's Division of Water Resources. Therefore, DAQ does not find this comment to be germane to this permitting action.</p> |

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|                   | <ul style="list-style-type: none"><li>• DNREC 2009: Memo for Delaware City Refinery Draft Subaqueous Lands Permit and Water Quality Certification.</li><li>• DNREC 2010: Secretary's Order re: Application to Dredge Portions of the Delaware River and Cedar Creek Near Delaware City.</li><li>• DNREC 2011: BTA Determination - NPDES Permit Requirements for Cooling Water Intake and Discharges at Delaware City Refinery and Power Plant.</li><li>• DNREC 2011: BTA Determination - Baseline Economic Viability of the Delaware City Refinery and Power Plant.</li><li>• DNREC 2011: NPDES Permit for Delaware City Refinery Cooling Water Intake (Pre-Notice Draft).</li></ul> <p>On December 19, 2012 DNREC held an air pollution public hearing for an ether cooling tower, which appears on page 211 of the Title V permit. In this hearing, we requested that the refinery be issued an updated NPDES permit as a condition of this ether cooling tower permit. We have received no response to this request.</p> <p>On March 28, 2013 the Delaware Economic Development Office issued the Refinery 27 Emission Reduction Credits as offsets for the operation of the Ether Plant cooling tower's reduction in the intake of Delaware River water for cooling (Appendix B). That air pollution increases are allowed for reductions in water intake without a new NPDES permit is highly inappropriate, yet through these claims of economic benefits of water intake at the Refinery, the Delaware Economic Development Office has tied the issuing of air</p> |                                |

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|                   | <p>permits and water permits together.</p> <p><b><i>We ask that DNREC require the Delaware City Refinery to apply for and obtain a National Pollution Discharge Elimination System permit within 6 months. We ask that the timeline for this process be provided in writing within the next 14 days, and that the public comment period be extended 30 days to enable us to respond to this information.</i></b></p>  |  |
| 38-SC             | <p>Petroleum coke is a major byproduct of refining crude oil, which is expected to become more problematic as the refinery shifts to increasing amounts of tar sands. Petroleum coke has recently become the center of national controversy as other tar sands refineries have begun to stockpile this black, coal-like waste.</p> <p>The former method for disposing of petcoke was burning it onsite. We understand that the refinery has recently shifted to exporting petcoke to China, where it is burned overseas. While this reduces local pollution, on a global scale, given lax pollution standards outside the United States, the process of exporting petcoke to China for use as fuel will make global pollution worse. The burning of petcoke is an environmental justice issue as well as a concern for climate change.</p> <p>Although the Refinery's draft Title V permit indicates that the Texaco Gasifiers have been permanently shut down, we lack confidence in the enduring nature of this statement. With the refinery now back in operation and given the recent restart of the ether cooling tower and olefins unit, we are concerned that the gasifiers can come back on-line as</p> | <p>DAQ disagrees. DCRC has completed construction of a fully enclosed state-of-the-art coke storage and handling facility in accordance with the Agreement governing the Acquisition and Operation of the Delaware City Refinery. DAQ inspections have found no violations associated with DCRC's operation of the new coke storage and handling facility. With regard to the Sierra Club's comment on the gasifiers being restarted, DAQ notes that this draft TV permit effectively cancels the authorization for these emissions units and renders this comment moot.</p> |

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|                   | <p>well.</p> <p><i>To protect the community from harmful emissions resulting from the use of the Texaco gasifiers, we ask that DNREC require the Delaware City Refinery to draft and publicize a long-term plan for the storage and removal of petroleum coke waste, which includes contingency plans if market conditions that make the export of petcoke to China advantageous change. We ask for this plan within <u>14 days</u>, and ask that the comment period be held open for <u>30 days</u> to allow us the opportunity to respond to your answers to our requests.</i></p>   |   |
| 39-EPA            | <p>As you are aware, Section IV of the Consent Decree (CD) regarding Civil Action No. H-01-0978 required the Delaware City Refinery to install Selective Non-Catalytic Reduction (SNCR) technology at the Fluid Coker Unit (FCU) and implement the use of Nitrogen Oxide (NOx) adsorbing catalyst at the Fluid Catalytic Cracking Unit (FCCU) to reduce NOx emissions at these process units. Paragraphs 15 and 25 of the CD further require that both short and long term concentration based NOx emission limits be set at the FCU and FCCU respectively. EPA Region III believes that these NOx limits established pursuant to the CD that were contained in the previous Title V permit are still applicable and should be retained in the new permit.</p> | <p>While DAQ does not disagree with EPA, DAQ believes it will be helpful to review the CD requirements and thereby provide the necessary clarification as to why these short and long term limits do not appear in the TV permit.</p> <p>Paragraph 15 of Section IV of the CD states:</p> <p><b><u>C. SNCR Outlet Emission Limits.</u></b></p> <p><i>15. As part of its Optimization Study report, Motiva shall propose to EPA short and long term concentration based limits, each at 0 % oxygen, and rolling averaging times (i.e., 3-hour, 12-hour, or 24-hour for short term rolling averages and 365-day for a long term rolling average) for FCCU and FCU NOx emissions, for optimized operation of the control system consistent with the provisions of Paragraphs 11 – 14. Motiva shall comply with the limits it proposes beginning immediately upon submission of its Optimization Study report to EPA, until such time as Motiva is required to comply with the emission limits set by EPA, pursuant to Paragraphs 16 and 17.</i></p> <p>Furthermore, Paragraphs 16 and 17 state:</p> <p><i>16. EPA will use the CEMS data collected during the Optimization Study and all</i></p> |

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|                   |                 | <p><i>other available and relevant information to establish limits for NOx emissions from the Norco FCCU and Delaware City FCU. EPA may establish NOx concentration limits based on a short term (e.g., 3-hour) rolling average and a long term (i.e., 365-day) rolling average, each at 0 % oxygen. EPA will determine the NOx concentration limits and averaging times for the Norco FCCU and Delaware City FCU based on the level of performance during the Optimization Study, a reasonable certainty of compliance, and any other available pertinent information.</i></p> <p><i>17. EPA will notify Motiva of NOx concentration limits and averaging times for each unit, and Motiva shall immediately, or within 30 days if EPA's NOx concentration limit is different from Motiva's proposed limit, operate its SNCR systems at the Norco FCCU and the Delaware City FCU so as to comply with the established emission limits.</i></p> <p>Paragraph 25 of Section IV of the CD states:</p> <p><b><u>G. FCCU (Additives) Emission Limits.</u></b></p> <p><i>25. As part of its report required by Paragraph 23, Motiva shall propose to EPA short and long term concentration based limits, each at 0 % oxygen, and rolling averaging times (i.e., 3-hour, 12-hour, or 24-hour for short term rolling averages and 365-day for a long term rolling average) for FCCU and FCU NOx emissions, consistent with the provisions of Paragraphs 22 through 24. Motiva shall comply with the limits it proposes beginning immediately upon submission of its report to EPA, until such time as Motiva is required to comply with the emission limits set by EPA, pursuant to Paragraphs 26 and 27.</i></p> <p>Furthermore, Paragraphs 26 and 27 state:</p> <p><i>26. EPA will use the CEMS data collected during the demonstration and all other available and relevant information to establish limits for NOx emissions from the Port Arthur, Convent and Delaware City FCCUs. EPA may establish NOx</i></p> |

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|                   |                 | <p><i>concentration limits based on a short term (e.g., 3-hour) rolling average and a long term (i.e., 365-day) rolling average, each at 0 % oxygen. EPA will determine the NOx concentration limits and averaging times for the Norco FCCU and Delaware City FCU based on the level of performance during the demonstration, a reasonable certainty of compliance, and any other available pertinent information.</i></p> <p><i>27. EPA will notify Motiva of NOx concentration limits and averaging times for each unit, and Motiva shall immediately, or within 30 days if EPA's NOx concentration limit is different from Motiva's proposed limit, operate the Port Arthur, Convent and Delaware City FCCUs so as to comply with the emission limits established by EPA.</i></p> <p>The Consent Decree for Civil Action No. H-01-0978 only requires final NOx limits for the FCU and FCCU at the Refinery to be in the facility's Title V permit and such final limits pursuant to the Consent Decree have not yet been set by EPA. Interim limits for NOx for the FCU and FCCU were included by DNREC in Reg 1102 permits previously but were revised or adjusted in accordance with Reg 1102 with alternative NOx limits achieving equivalent or greater NOx reductions. All current Reg. 1102 NOx limits which are applicable requirements are appropriately included in the Title V permit.</p> |

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